

**A NEW GENUS AND THREE NEW SPECIES OF TREEHOPPER
TRIBE DARNINI (HEMIPTERA, MEMBRACIDAE)¹**

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ABSTRACT

Nasuconia gen. nov. (type species *Oxygonia lineosa* Walker, 1862) is proposed together with three new species from Brazil: *N. catarina* sp. nov. (Santa Catarina), *N. nanica* sp. nov. (Bahia), and *N. curculionoida* sp. nov. (Mato Grosso). *Oxygonia lineosa* is removed from the synonymy of *Maturitaria ephippigera* (Fairmaire, 1846) and reinstated as *Nasuconia lineosa* (Walker, 1862) comb. nov., being transferred from Smiliinae to Darninae. Illustrations of the species are given.

Key words: Auchenorrhyncha, Darninae, description, Homoptera, taxonomy.

RESUMO

Um novo gênero e três novas espécies de membracídeos da tribo Darnini (Hemiptera, Membracidae)

Nasuconia gen. nov. (espécie-tipo *Oxygonia lineosa* Walker, 1862) é proposto juntamente com três espécies novas, todas do Brasil: *N. catarina* sp. nov. (Santa Catarina), *N. nanica* sp. nov. (Bahia) e *N. curculionoida* sp. nov. (Mato Grosso). *Oxygonia lineosa* é retirada da sinonímia de *Maturitaria ephippigera* (Fairmaire, 1846) e revalidada como *Nasuconia lineosa* (Walker, 1862) comb. nov., sendo transferida de Smiliinae para Darninae. As espécies são todas ilustradas.

Palavras-chave: Auchenorrhyncha, Darninae, descrição, Homóptera, taxonomia.

INTRODUCTION

gen. nov.

WALKER (1862) described *Oxygonia lineosa* from a specimen collected in Rio de Janeiro, Brazil. The genus *Oxygonia* Fairmaire, being a junior homonym, was later replaced by *Gelastogonia* Kirkaldy. FUNKHOUSER (1927) catalogued as *Gelastogonia lineosa*. In METCALF & WADE (1965) and MCKAMEY (1998) catalogues, the species was included in *Maturitaria* Metcalf, but as junior synonym of *M. ephippigera* (Fairmaire). *Gelastogonia* and *Maturitaria*, however, are both Smiliinae genera (DEITZ 1975; SAKAKIBARA 1996). *Oxygonia lineosa* Walker, on the other hand, belongs to Darninae. Therefore, it is herein transferred to Darninae-Darnini, in combination with a new genus.

Type species: *Oxygonia lineosa* Walker, 1862.

Head triangular, densely punctate and covered with short decumbent hairs; vertex slightly convex, weakly sculptured, superior margin arched, supra-antennal ledges in the same plane of vertex, margins straight, convergent to apex of posclypeus; eyes ovoid, not prominent; ocelli conspicuous, slightly nearer to eyes and to superior margin than to each other; posclypeus conical, obliquely projected forward well beyond margins of supra-antennal ledges, surface usually corrugated, apex obtuse and hairy.

Pronotum well developed, covering tegmina almost completely; surface densely punctured and adorned with several longitudinal elevated lines (contrasted by their lighter color); dorsum low and convex, distinctly depressed before middle, then slightly elevated and gradually descending to apex

Abbreviations used: BMNH – The Natural History Museum, London, UK. DZUP – Departamento de Zoologia, Universidade Federal do Paraná, Curitiba, Paraná, Brazil.

Recebido em: 15.08.06; aceito em: 23.10.06.

¹ Contribution n° 1657 of the Departamento de Zoologia, Universidade Federal do Paraná.

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³ CNPq fellowship.

which is more or less tectiform, acute; in dorsal view, the posterior process gradually tapering to apex, sometimes slightly bulged at each side before apex. Postocular lobules adpressed to thorax, with distance between eye and humerus less than the largest diameter of eye. Humeral angles short, triangular, horizontally projected, somewhat flattened dorso-ventrally.

Tegmina almost entirely concealed by pronotum; veins R and M close to costal margin; two discoidal and five apical cells, the third one with length more than twice its maximum width (near apex); crossveins s, r-m, and two m-cu present; vein R₄₊₅ distally curved to costal margin.

Comments. This new genus is classified in the subfamily Darninae, tribe Darnini, as defined by DEITZ (1975); it is very close to *Aspona* Stål in overall aspects and also to *Cyphotes* Germar; it differs, however, from the first genus by the following characters: posclypeus conical, projected well beyond the lower margin of vertex, its basal width just little more than the distance between ocelli, the surface transversely ridged; pronotum convex, weakly sculptured, more or less navicular, in some cases just slightly bulged at sides, usually with several longitudinal elevated lines, some of them fused or branched; tegmina with crossvein s sometimes missing. The genus *Cyphotes*, though having some similarities, can be separated by the posclypeus rather globoid than conical, almost as long as wide; the pronotum, in lateral view, constricted after humeral angles and then strongly inflated and suddenly narrowing to the apex.

Etimology. Derived from latin, *nasus+conus*, because of the posclypeus protruded like a long nose.

(Walker, 1862) comb. nov.; sp. rev.

Figs. 1, 5

Oxygonia lineosa Walker, 1862: 318 (type loc.: Brazil, Rio de Janeiro); Broomfield, 1971: 359 (lectotype male, BMNH).

Gelastogonia lineosa; Funkhouser, 1927: 315.

Maturitaria ephippigera; Metcalf & Wade, 1965: 1055 (syn.); McKamey, 1998: 273 (syn.) (error).

Male. Head, pronotum, and legs castaneous; longitudinal elevated lines of pronotum yellowish; undersurface of body black.

Head triangular, wider than long; posclypeus about twice as long as wide at base, its width not more than the distance between ocelli, apical third projected beyond supra-antennal ledges. Pronotum convex,

navicular, dorsally depressed just behind the humeral angles forming a shallow v-shaped groove; humeral angles expanded horizontally in a triangular and very acute process; posterior process distinctly elevated after metopidium, then more or less tectiform, with dorsal outline gradually descending to apex. Tegmina hyaline, somewhat smoked along costal margin.

Female. Very similar to male, just a little larger.

Measurements (in mm). Male/female: total length 7.00/7.48; width of head 2.72/2.80; length of head 1.60/1.60; distance between apices of humeral angles 3.92/4.00.

Material examined. BRAZIL. Parana: Ponta Grossa, I-1944 [col. Justus], 1 female. Santa Catarina: Hansa [Corupá], 1937, Fr. J. Clermont col., 1 female, 1 male. (DZUP).

Comments. This species is closely related to *Aspona bullata* Stål in having the pronotum covering almost completely the tegmina and presenting a depression, or constriction, behind the humeral angles. It differs by the shape of posclypeus, more conical and elongate, and by the pronotum less inflated postero-laterally and with numerous elevated lines, or vein-like as Walker defined. This last character (carinate pronotum as in *Oxygonia*, *Gelastogonia*, *Maturitaria*), probably, lead the authors to misplace the species in Smiliinae-Polyglyptini. BROOMFIELD (1971) designated the lectotype male from the syntypes in the BMNH, and added the following note: "There is a female from the type-series in the collection".

sp. nov.

Figs. 2, 6

Male. Head, pronotum, and legs dark-castaneous; longitudinal elevated lines yellowish, formed by a sequence of dots some of them coalescent; underside of body blackish; tegmina infuscated along 1/3 costal margin.

Head triangular, wider than long; posclypeus conical, about its half projected beyond supra-antennal ledges, surface corrugated. Pronotum convex, low, weakly depressed on dorsum; humeral angles short, triangular, apex blunt.

Female. Unknown.

Measurements (in mm). Male: total length 8.60; width of head 2.76; length of head 1.60; distance between apices of humeral angles 3.48.

Holotype male. BRAZIL. Santa Catarina: "Brusque-SC | XII.1970 | V.O. Becker" (legs missing, except the left hind leg) (DZUP).

Comments. This new species is very similar to *N. lineosa* (Walker), differing in the following characters: head with posclypeus longer, distinctly corrugated, prolonged about half its length beyond the supra-antennal ledges; pronotum low, with dorsal depression less marked; in lateral view, the dorsal outline regularly rounded.

sp. nov.

Figs. 3, 7

Male. Entirely yellowish-brown, except head and thorax beneath, apex of humeral angles, and apex of abdomen, black; longitudinal elevated lines very faint and yellowish.

Head triangular, about as wide as long; posclypeus conical, extended almost 2/3 of its length beyond supra-antennal ledges, surface corrugated, apex slightly curved downwards. Pronotum convex, low, weakly depressed on dorsum; in lateral view, with dorsal outline regularly rounded; humeral angles short, triangular, apex acute.

Female. Unknown.

Measurements (in mm). Male: total length 5.64; width of head 1.84; length of head 1.48; distance between apices of humeral angles 2.56.

Holotype male. BRASIL. Bahia: “Encruzilhada-BA | Brasil – XI.1972 | Seabra/Alvarenga” (DZUP).

Comments. The overall aspect is very similar to *N. catarina* sp. nov.; it differs in the yellowish color and smaller size.

sp. nov.

Figs. 4, 8, 9

Female. Head, tips of humeral angles, underside of thorax, legs, and abdomen, black; pronotum dark-castaneous with longitudinal elevated lines yellowish.

Head triangular, longer than wide; ocelli relatively large; posclypeus conic-ovoid, almost three times longer than its width at base, extended well beyond margin of vertex, surface corrugated, apex curved downwards; supra-antennal ledge elongated and tapering distally. Pronotum convex, low, feebly depressed on dorsum and slightly bulged at each side before apex; elevated longitudinal lines irregular, interrupted many times; a very distinct and continuous elevated line crossing obliquely from margin to margin before apex. Lateral margins near apex, obliquely cut exposing part of tip of tegmina. Humeral angles short,

acute, more or less bilobate. Anterior legs with tibia enlarged to apex, spatulate.

Male. Unknown.

Measurements (in mm). Female: total length 7.60; width of head 1.96; length of head 2.00; distance between apices of humeral angles 3.00.

Holotype female. BRAZIL. Mato Grosso: “SINOP-M. Grosso | Brasil – X.1975 | M. Alvarenga” (DZUP).

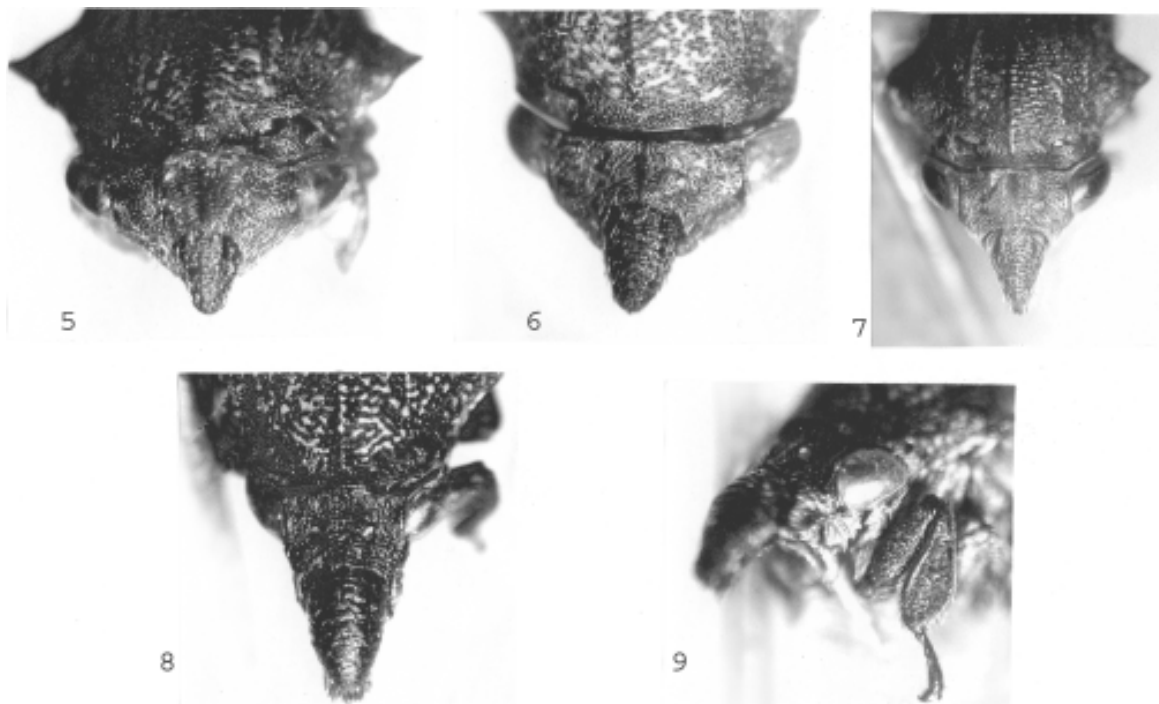
Comments. This species is characterized by its long and downward bent posclypeus, resembling a curculionid beetle in lateral view. The head is narrower than in other species, with large ocelli, supra-antennal ledges tapering forwards. The pronotum is weakly depressed on dorsum and laterally, before apex, slightly bulged. The form of head and pronotum give an aspect of *Cyphotes*; other characters, such as posclypeus conical and narrow, distance from eye to humerus less than a diameter of eye, are of *Nasuconia*. The anterior legs with spatulate tibia and also the lateral margins of pronotum obliquely cut at apex, leaving part of tegmina visible, do not occur in other species, as well as the oblique elevated line before apex.

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Figs. 1-4. *Nasuconia* gen. nov., lateral view: **1** - *N. lineosa* (Walker, 1862); **2** - *N. catarina* sp. nov. (holotype); **3** - *N. nanica* sp. nov. (holotype); **4** - *N. curculionoida* sp. nov. (holotype).



Figs. 5-9. *Nasuconia* gen. nov., head and part of pronotum: **5** - *N. lineosa* (Walker, 1862); **6** - *N. catarina* sp. nov.; **7** - *N. nanica* sp. nov.; **8, 9** - *N. curculionoida* sp. nov.