# Tainosia quisqueyae gen. and sp. nov. from the Oligocene/Miocene Dominican amber

(Hemiptera: Fulgoroidea: Nogodinidae)

Jacek Szwedo<sup>1</sup>, Adam Stroiński<sup>2</sup>

<sup>1</sup>Department of Zoology, University of Silesia, Bankowa 9, PL40-007 Katowice, Poland, e-mail: szwedo@us.edu.pl

<sup>2</sup>Museum and Institute of Zoology, Polish Academy of Sciences, Wilcza 64, PL00–679
Warszawa, Poland.

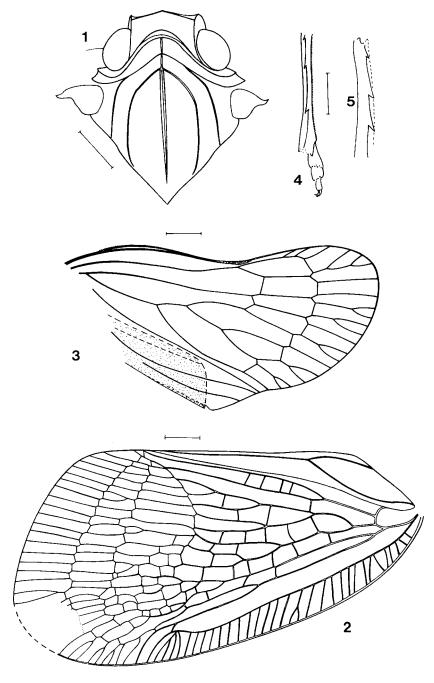
e-mail: adam@robal.miiz.waw.pl

ABSTRACT. *Tainosia quisqueyae* gen. and sp. n. from Dominican amber (Oligocene/Miocene) is described. It is the second representative of the family found in New World resins, but the first from this source of fossils. It represents *Nogodinini*: *Nogodinina sensu* Fennah (1978).

Key words: entomology, taxonomy, fossils, new genus, new species, *Hemiptera*, *Fulgoroidea*, *Nogodinidae*, *Nogodinini*, *Tainosia*, Dominican amber, Oligocene/ Miocene

#### INTRODUCTION

Fossil resins of the New World are known as a rich source of inclusions (Poinar 1992, 1993). The most famous is Dominican amber, which originated from a leguminous (*Fabaceae*) tree of the genus *Hymenaea* (Poinar 1991, 1992; Caridad 1999). Dominican amber dates frim Oligocene to Lower Miocene, some deposits are regarded as originating from the Middle Eocene (Poinar 1992, Krumbiegel & Krumbiegel 1996, Caridad 1999). According to Iturralde-Vinent & MacPhee (1996) the amberiferous deposits in the Dominican Republic were formed 15–20 Ma, during the Late Early Miocene through the early Middle Miocene.



 $1-5.\ Tainosia\ quisqueaye\ gen.\ and\ sp.\ n.:\ 1\ -\ anterior\ part\ of\ the\ body,\ 2\ -\ right\ tegmen,\ 3\ -\ right\ wing,\ 4\ -\ hind\ tibia\ and\ tarsus,\ 5\ -\ hind\ tibia\ in\ lateral\ aspect,\ scale\ bar:\ 1\ mm$ 

## SYSTEMATICS

The first fossil representative of New World *Nogodinidae* was described from Mexican amber (Stroiński & Szwedo 2000). It belongs to the tribe Nogodinini, subtribe *Nogodinina*. The genus described below represents *Nogodinina sensu* Fennah (1978). Other fossil representatives of this family have been mentioned from the Old World (Jacobi 1938, Haupt 1956, Szwedo & Stroiński 1999), but they belong to the tribe *Bladinini*.

## Tainosia n. gen.

ETYMOLOGY

The generic name is derived from the name of an indigenous tribe inhabiting Haiti Island – Tainos, Gender: feminine.

Type species

Tainosia quisqueyae sp. n., by monotypy.

Diagnosis

*Tainosia* gen. n. bears characters not found in the first known fossil genus *Tonocatecutlius* STR. et Szw., 2000: anterolateral carinae of mesonotum present; costal cell and clavus without transverse veinlets; hind tibia with 3 lateral spines

An additional distinctive feature is a network of veins on the upper half of tegmen, between nodal and apical lines, like in *Tonocatecutlius*.

DESCRIPTION

See description of Tainosia quisqueyae n. sp.

## Tainosia quisqueyae n. sp.

ETYMOLOGY

The species name was coined from the original name of Haiti Island – Quisqueya.

DIAGNOSIS

Mesonotal anterolateral carinae separated from lateral carinae; costal margin in basal part mildly convex, straight in the mid line.

DESCRIPTION

Total length 14.4 mm. Vertex, about 3.8 times as broad as long, without median carina; angulately produced anteriad, posterior margin arcuate. Lateral

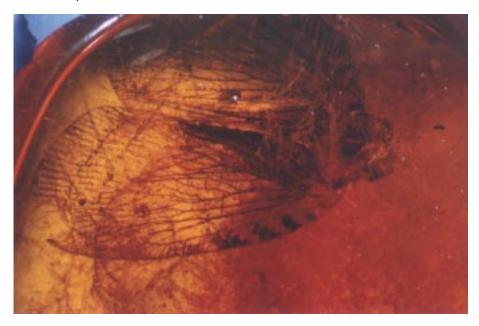
margins straight and parallel. From with median carina distinct, lateral margins slightly elevated.

Pronotum with median carina, 0.7 times shorter than vertex. Anterior and posterior margins arcuate, parallel.

Mesonotum with scutellum 1.1 times wider than long, 2.8 times longer than of vertex and pronotum combined; lateral carinae somewhat curved, reaching posterior margin of mesonotum. Anterolateral and lateral carinae subparallel; the former almost straight, separated from lateral carinae; lateral carinae running from anterior margin up to posterior margin of mesonotum (Fig. 1).

Tegula about 1.3 times wider than long.

Tegmina elongated, about twice as long as wide, with numerous transverse veinlets. Costal margin weakly curved basally and almost straight in median portion, apical margin mildly convex; apical and claval angles broadly rounded. Nodal line and two apical lines present. Costal membrane about 1.4 times wider than costal cell, with numerous transverse veinlets, slightly widening apically. Costal cell without transverse veinlets. Basal cell about twice as long as wide. Sc+R separating from basal cell with a short common stem; stem of media about 2.3 times longer than common stem of Sc+R; Cu separating from basal cell with a long stem about 2.4 times longer than in M. Apical and subapical cells longer than wide; apical cells about 6.4 times longer than wide, subapical cells 1.8 times shorter than apical cells and 5 times longer than wide. Clavus without transverse veinlets; A<sub>1</sub> connected with PCu before middle of clavus (Fig. 2).



6. Tainosia quisqueaye gen. and sp. n. in general view

Wing hyaline, fumose, with venation as in figure 3.

Hind tibia with 3 lateral spines; first tarsomere 1.4 times longer than second, second and third tarsomeres equal in length (Fig. 4).

Coloration: Tegmina semihyaline with an indistinct colour pattern; costal membrane with 7 dark markings and a single round spot on R branches, at the level of transverse veinlet of costal cell, subapical and apical cells fumose.

Measurements are given in table 1.

## MATERIAL

Holotype, sex unrecognisable, [BMNH Pal. PI II 62 / Insecta, Pterygota, Hemiptera, / Homoptera, Fulgoroidea, Nogodinidae. / Identified by Webb, M. / Oligocene, Dominican amber. / Dominican Republic. / Presd, Cobra & Belamy,, 02 Nov 1993.] Deposited in Department of Palaeontology, Natural History Museum, London.

Table. Measurements of the specimen

	measurements in mm
total length	14.37
width of head with compound eyes	2.44
length of vertex in middle line	0.34
length of head at side	0.71
width of vertex	1.27
maximum width of head at the posterior margin	2.67
length of pronotum	0.61
length of pronotum	2.93
length of mesonotum	2.96
width of mesonotum	2.77
length of tegula	0.55
width of tegula	0.62
length of basal cell	1.05
width of basal cell	0.58
length of tegmen	11.97
width of tegmen	5.92
length of claval suture	9
length of clavus at vein A2	6.2
length of wing	8.73
length of hind tibia	~3.2
length of tarsus	1.26
length of tarsomere: 1	0.61
length of tarsomere 2	0.44
length of tarsomere 3: (with claw)	0.39

The specimen quite well preserved, anterior part of body in dorsal view partly covered with internal fractures; left tegmen hardly visible because of the curvature of amber, right tegmen with apical angle torn out. Ventral part of body very poorly visible because of numerous bubbles, hind legs partly destroyed.

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