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A NEW BLATTOID FROM THE CRETACEOUS OF BRASIL

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Ivone Purper **

SINOPSE

É descrita uma nova barata **Mesoblattina limai** Pinto et Puerper, sp.nov. da Familia Mesoblattinidae da Formação Santana, Cretáceo, da Chapada do Araripe (Brasil).

ABSTRACT

Mesoblattina limai Pinto et Purper, sp.nov., a new cockroach from Santana Formation, Cretaceous, Chapada do Araripe (Brasil) is described.

INTRODUCTION

This paper continuous the studies of the entomofauna of that area. The material studies was provided by Prof. Dr. Murilo Rodolfo de Lima from the Universidade de São Paulo.

Acknowledgment to Prof. Dr. Murilo Rodolfo de Lima who has provided the material for study, to Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) and to the Câmara Especial de Pós-Graduação e Pesquisa of the Universidade Federal do Rio Grande do Sul, for their continuous cooperation.

SYSTEMATICS

Ordo Blattodea

Familia Mesoblattinidae Handlirsch, 1906

Characterized by a most remarkable reduction of the costal area,

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the place of which the radius with its branches now fills. The media is free and is divided in various ways, and so is cubitus. Most of the viens of the anal area reach to the inner margin.

Genus **Mesoblattina** Geinitz, 1880

Mesoblattina limai Pinto et Purper, sp.nov.

Pl. I-II

Designatio nominis: In honour of Prof. Dr. Murilo Rodolfo de Lima
Holotypus: One Impression of an almost complete specimen MP-I-6400
Locus typicus. Fazenda Sta.Rita, Chapada do Araripe
Stratum typicum: Formação Santana, Cretaceous

DIAGNOSIS Body 13.15mm long; head wide, pronotum subcircular, tegmen 12.80mm long, 1.36mm wide; costal area short; SC bifurcated; R with 8 to 11 branches some furcated. MA and CuA free; anal veins simple; intercalated veins and few cross-veins present.

DESCRIPTION An almost complete specimen showing the two tegmina and a distal part of the hind-wing; the body is 13.15mm long and 3.63mm wide, the head is 2.mm wide, stretched out in front of the subcircular laterally expanded pronotum which is 4.00mm wide; thorax and abdomen not very well preserved, legs not preserved; cerci long with about ten joints.

WINGS The two tegmens and the apex of one hing-wing are preserved. Tegmen represented at the left side of Pl.I-II is very well preserved; it is elongated and narrow, three and a half times as long as wide, 12.8 mm in length, 3.6mm wide; anterior margin slightly curved, hind margin straight and parallel to the anterior margin; apex acutely rounded. Costal area reduced, without distinct veins and shorter than anal area; SC reduced to one straight forked vein, the longest branch reaching the same size as the anal area. R extending in an almost straight course to the tip of the wing and with its eight branches directed obliquely forward, taking up less than half the surface wing; the first and the last three branches fork twice and end single. M free, runs parallel to R and subdivides into three branches near the outer margin; the first one single, the second one forks twice and the third one forks once. Cu also a free vein, runs parallel to M and divides at the same level, the anterior branch is single and the posterior forks once distally, the branches being directed outwards. Vena dividens strongly impressed. Anal

region elongated, its branches are simple except the last one which bifurcates. Intercalated longitudinal striae occur between veins specially on the distal side. Some irregularly disposed cross-veins are also seen. The second tegmen, represented on the right side, differs in some details from the tegmen above described, i.e., the SC seems single, not forked; there are three more branches (eleven) on R, which are equally disposed as far the sixth branch: M divides much more distally than Cu and it has three branches also, but it forks distally; the third branch is single, but it is forked at the firts tegmen described.

DISCUSSION This species presents strong similarity with **Rhipidoblattina angustata** Martinov, 1937 from the Liassic of Kuzil-Kin, Turkestan, specially is the form of the wing, in SC, R and M; however, it differs from that one because **R. angustata** has one more bifurcate vein in Cu and the second and third anal vein bifurcate. It also present great similarity with **Mesoblattina vitimica** Vishniakova, 1964 from the Upper Jurassic of the Vitima river - USSR specimen nº 1989/1648 but it differs from this species because it has SC bifurcate, M and Cu free.

Martinova (1937) pointed out that **Mesoblattina** and **Rhipidoblattina** have so many similarities that they could be sinonimous and in this case the priority will be for **Mesoblattina**.

The present speciemn presents some characteristics which allow it to be classified as **Mesoblattina** and some others as **Rhipidoblattina**. It was classified as **Mesoblattina** only because the majority of **Rhipidoblattina** has the anal veins forked while in **Mesoblattina** they are single.

It present another amazing similarity with one species of the recent genus **Amazonina** Hebard, 1929: **A. tingomariensis** Rocha e Silva, 1964, from Peru. The shape and dispisition of veins of **A. tingomariensis** are so similar that, based on the wing veins, it could be also classified as **Mesoblattina**. It differs from the present species in having M With more veins and in the fusion of M and Cu with R basally, as **Mesoblattina vitimica** Vishniakova.

OCCURRENCE At Santana Formation, Cretaceous, at Sitio Sta. Rita, Chapada do Araripe, Pernambuco, Brasil.

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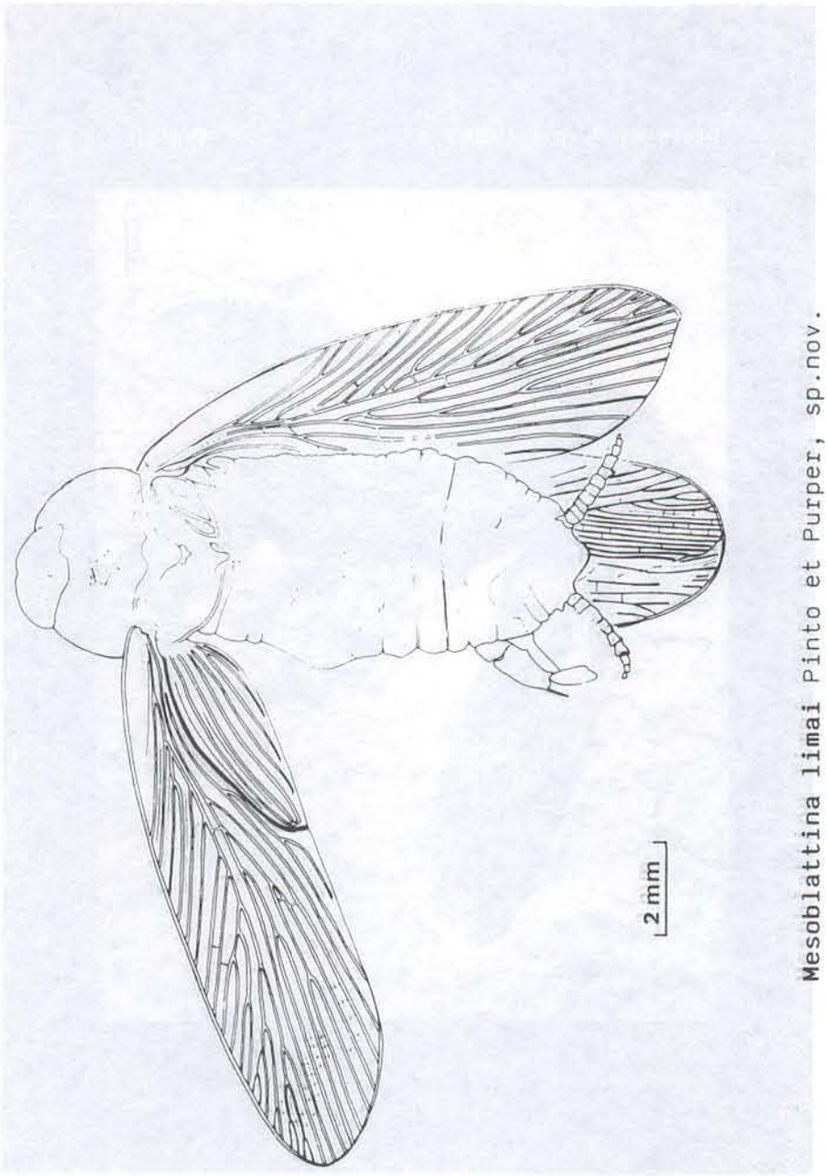

Mesoblattina limai Pinto et Purper, sp.nov.

Pinto et Purper, 1986 Plate II