

**GILMORETEIIDAE NEW FAMILY AND *Gilmoreteius*  
NEW GENUS (SQUAMATA, SCINCOMORPHA):  
REPLACEMENT NAMES FOR  
MACROCEPHALOSAURIDAE SULIMSKI, 1975  
AND *Macrocephalosaurus* GILMORE, 1943**

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RESUMO

**Gilmoreteiidae Fam. nov. e *Gilmoreteius* Gen. nov. (Squamata, Scincomorpha): nomes substituídos para Macrocephalosauridae Sulimski, 1975 e *Macrocephalosaurus* Gilmore, 1943.**

*Macrocephalosaurus* Gilmore, 1943 é considerado homônimo júnior de *Macrocephalosaurus* Tupi-Caldas, 1933. Um *nomen novum* – *Gilmoreteius* gen. nov. – é proposto como substituto para *Macrocephalosaurus*. Do mesmo modo, o nome de grupo família – Gilmoreteiidae fam. nov. – é proposto como nome substituto para Macrocephalosauridae Sulimski, 1975.

ABSTRACT

*Macrocephalosaurus* Gilmore, 1943 is regarded as a junior homonym of *Macrocephalosaurus* Tupi-Caldas, 1933. A *nomen novum* – *Gilmoreteius* new genus – is proposed as a replacement name for *Macrocephalosaurus*: Gilmore, 1943. Likewise, a new family group name – Gilmoreteiidae new name – is proposed as a replacement name for Macrocephalosauridae Sulimski, 1975.

DISCUSSION

In an appendix to a textbook on the Brazilian mineralogy and geology, Tupi-Caldas (1933) proposed the name *Macrocephalosaurus*

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*mariensis* to designate, according to his identification, a fossil “theromorph” reptile collected in the “alemoa beds”. The material, an almost complete skeleton, was found in 1932, near the town of Santa Maria, in the state of Rio Grande do Sul, Brazil, and was deposited at the State Museum “Julio de Castilhos”, in Porto Alegre (Beltrão, 1965).

Today, the material reported by Tupi-Caldas (1933) is housed at the Museu de Ciências Naturais – Fundação Zoobotânica do Rio Grande do Sul, Porto Alegre (MCN 1867), after being transferred from the discontinued Natural History Collection of the State (History) Museum “Julio de Castilhos”. Currently, that specimen is classified among the hyperodapedontid rhynchosaurs, being tentatively assigned to *Hyperodapedon huxleyi* Lydekker, 1885 (Langer, 1996). In such case, *Macrocephalosaurus mariensis* Tupi-Caldas would represent a junior subjective synonym of *Hyperodapedon huxleyi* Lydekker.

Presently, the holotype is represented only by the skull, mandible, the left shoulder girdle, the proximal portion of the left humerus, the left clavicle, and some cervical and trunk vertebrae (Fig. 1). Most of the posterior portion of the skeleton originally reported by Tupi-Caldas could not be found among the material transferred from the “Julio de Castilhos”, and was probably lost during the relocation of the specimen in 1954-55.

The “alemoa beds” are the most common rocks cropping out along the surroundings of the town of Santa Maria. These strata are currently related to the Alemoa Member of the Santa Maria formation, Rosário do Sul group, Triassic of the Paraná basin (Andreis *et al.*, 1980). Besides, the presence of rhynchosaurs indicates a Carnian age (Rhynchosaur Cenozoone) to the sediments from which the specimen reported by Tupi-Caldas (1933) was collected (Scherer *et al.*, 1996).

In his confused nomenclatural proposition, Tupi-Caldas (1933: 339, conclusion 4) regarded the fossil described by him as indistinguishable from the material described by Woodward (1907), on the proposition of *Scaphonyx fischeri*, stating that it was “identified as having, on the left foot, digits equals to the ones studied in 1907 by A.-S. Woodward” and that “there are similarities on the vertebrae” (translated by the author).

Tupi-Caldas (1933: 339, conclusion 5) also states that “the studied fossil presents all the characters anticipated by A.-S. Woodward, who named it *Scaphonyx fischeri*” (translated by the author). In this passage,

Tupi-Caldas used the term “fossil” regarding to the taxon he discussed, not to the specimen, assigning the specimen in question to the taxon defined by Woodward (1907).

However, Tupi-Caldas (1933) considered the name *Scaphonyx* Woodward (from the Greek *scaphos* = canoe and *onyx* = claw, referring to the canoe-shaped groove present in the unguis phalanx of the specimen) to be etymologically inadequate to describe the overall morphology of the taxon in question. Study that could have been greatly improved based on the much more complete specimen reported by that author. Tupi-Caldas (1933: 339, conclusion 7) argued that “if people do not wish to maintain the generic name *Scaphonyx* (indicating the groove on the unguis phalanx) another one could be adopted” (translated by the author).

Finally, Tupi-Caldas (1933) proposed a new conditional name (ICZN, 1985: Art. 15; p. 252), *Macrocephalosaurus mariensis*, specifically referring to the specimen he studied. This name, in his opinion (1933:339, conclusion 7), describes more adequately the morphology of the fossil. In his own words: “Since in the fossil housed at the State Museum the head is bulky, cylindrical in shape, maybe the name *Macrocephalosaurus mariensis* is adequate for it, indicating the size of the head, the zoological class which it belonged during life, and to the locality from which it was discovered” (translated by the author).

Naturally, such an argumentation, based on inappropriateness, is not enough, according to the current norms of the ICZN (1985: Arts. 18, 23m), to advocate for the proposition of a new name. However, regardless of this inadequate motivation, the nomenclatural proposition was, in fact, made, and adequately made. It satisfies the requirements of the ICZN (Arts. 11, 13): the name was spelled in Latin, the binomial nomenclature was used, it was accompanied by a description of the type-material, and so on. Besides, although Tupi-Caldas (1933) constitutes a textbook, also the criteria of publicity (ICZN, Art. 8) were fulfilled: it provides a permanent scientific record; it was obtainable when issued; it was produced by editorial printing, and others. Therefore, *Macrocephalosaurus mariensis* Tupi-Caldas, 1933 is accepted as a valid name herein.

Ten years later, Gilmore (1943) described what he consider to be a new agamid lizard (Reptilia – Squamata – Sauria) from the Djadokhta

Formation, Late Cretaceous of Mongolia. He proposed new generic and specific names to that reptile: *Macrocephalosaurus ferrugenous*. The holotype of *M. ferrugenous*, an incomplete skull and a partial right ramus of the mandible, is housed at the American Museum of Natural History (AMNH 6520). Presently, that taxon is assigned to the family Macrocephalosauridae Sulimski, 1975, a group of teiid-like scincormorph lizards (Alifanov, 1993).

The generic name created by Gilmore (1943) has, obviously, the same spelling of *Macrocephalosaurus* Tupi-Caldas, 1933. Therefore, taking into account the priority of the name proposed by Tupi-Caldas (1933), *Macrocephalosaurus* Gilmore is regarded as a junior homonym of *Macrocephalosaurus* Tupi-Caldas (ICZN, 1985: Arts. 52, 53, 56). Moreover, according to the rules of the ICZN (Art. 60) the generic name *Macrocephalosaurus* Gilmore, 1943 must be rejected and replaced by a replacement name; i.e.: *nomen novum*.

No mention to objective synonyms of *Macrocephalosaurus ferrugenous* Gilmore, nor even to any subgenus of it, was found in the literature, situations in which one of them could be the replacement name for the generic junior homonym *Macrocephalosaurus* Gilmore (ICZN 1985: Art. 60b). Therefore, a new generic replacement name, *Gilmoreteius* new name, is here proposed for the fossil lizard.

Moreover, Sulimski (1975) creates the family Macrocephalosauridae, with *Macrocephalosaurus* Gilmore as the type genus. This familiar name is invalid, along with all its coordinate names (*vide* Alifanov, 1993), since its type genus is a junior homonym (ICZN 1985: Art. 39). Similarly, a junior synonym of Macrocephalosauridae was not found in the literature, to replace this familiar name. So, according and following the rules of the ICZN, a new familiar replacement name is also proposed herein, namely Gilmoreteiidae fam. nov.

#### Family GILMORETEIIDAE nov.

**Type genus.** *Gilmoreteius* nov.

*Gilmoreteius* gen. nov.

**Type species.** *Gilmoreteius ferrugenous* (Gilmore, 1943).

**Etymology.** *Gilmore*, in honor of Charles Gilmore, who first described the type species; *teius* in reference to the general affinity of this Mongolian form to the actual tegu lizards (Alifanov, 1993).



**Figure 1.** *Macrocephalosaurus mariensis* Tupi-Caldas, 1933; holotype (MCN 1867). Left side of the recuperated parts of the type material, anterodorsal view. Note the incompleteness of the specimen, if compared to the original photograph of Tupi-Caldas. Scale = 10 cm.

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