



## **A reassessment of the anatomy and taxonomy of the Ischigualastian South American aetosaurs (*Archosauria*, *Pseudosuchia*)**

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The Ischigualastian (late Carnian-middle Norian, Late Triassic) South American aetosaur record is dominated by the genus *Aetosauroides*. Two different species have been reported, the Argentinean *Aetosauroides scagliai* Casamiquela and the Brazilian "*Aetosauroides subsulcatus*" Zacarias. Although both species were regarded as synonymous with *Stagonolepis robertsoni* Agassiz, this synonymy has not been followed by most researchers and is also dismissed here. As recently pointed out, no features distinguish "*A. subsulcatus*" from *A. scagliai* and a unique combination of apomorphies supports their synonymy. Additionally, an undescribed aetosaur specimen (CPE2 168) from the Hyperodapedon Assemblage Zone of the Brazilian Santa Maria Formation is considered here as a new genus. CPE2 168 consists of a fragmentary postcranium including one cervical, nine dorsal, and one caudal vertebrae, right scapula, humerus, tibia, metatarsals, pedal phalanges, and paramedian osteoderms. CPE2 168 differs from *A. scagliai* (= "*A. subsulcatus*") on the following characters: cervical vertebrae lacking ventral keels, dorsal vertebrae with hyposphenes and hypantra, fossae anterolateral to the neural spine base, low neural spines and without vertebral laminae and lateral fossae below the neurocentral suture. Thus, a new taxon is added to the list of South American Ischigualastian aetosaurs, which is currently composed of two species. As also is the case with proterochampsids, herrerasaurids, and *Hyperodapedon sanjuanensis* (Sill) among others, the Ischigualastian aetosaur record supports at least some degree of South American endemism during this time-span. Finally, although the genus *Stagonolepis* has been employed as an index taxon for the Adamanian land vertebrate faunachron, this genus is currently restricted to the Late Triassic of Europe and North America but absent in South America, and no overlapping genus or species of aetosaur are shared between South America and other landmasses. Accordingly, the record of aetosaurs is not useful at the time of performing global biostratigraphical correlations of Late Triassic assemblages.

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