



The anatomy and phylogenetic position of the Triassic dinosaur *Staurikosaurus pricei* Colbert, 1970

JONATHAS DE SOUZA BITTENCOURT¹ & ALEXANDER WILHELM ARMIN KELLNER²

¹Programa de Pós-graduação em Biologia Comparada, Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto, Universidade de São Paulo. Avenida Bandeirantes 3900, Monte Alegre, 14040-901, Ribeirão Preto-SP, Brazil. E-mail: jonathas@pg.ffclrp.usp.br

²Setor de Paleovertebrados, Departamento de Geologia e Paleontologia, Museu Nacional, Universidade Federal do Rio de Janeiro. Quinta da Boa Vista s/n, São Cristóvão, 20940-040, Rio de Janeiro-RJ, Brazil. Fellow CNPq and FAPERJ. E-mail: kellner@mn.ufrj.br

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Abstract

We redescribe the holotype of the saurischian dinosaur *Staurikosaurus pricei* Colbert, 1970 from Late Triassic Santa Maria Formation (southern Brazil), following additional preparation that revealed new anatomical features. A revised diagnosis is proposed and the published synapomorphies for Dinosauria and less inclusive clades (e.g. Saurischia) are evaluated for this species. Some characters previously identified as present in the holotype, including the intramandibular joint, hyosphene-hypantrum articulations in dorsal vertebrae, and a cranial trochanter and trochanteric shelf on the femur, cannot be confirmed due to poor preservation or are absent in the available material. In addition, postcranial characters support a close relationship between *S. pricei* and *Herrerasaurus ischigualastensis* Reig, 1963 (Late Triassic, Argentina), forming the clade Herrerasauridae. Several pelvic and vertebral characters support the placement of *S. pricei* as a saurischian dinosaur. Within Saurischia, characters observed in the holotype, including the anatomy of the dentition and caudal vertebrae, support theropod affinities. However, the absence of some characters observed in the clades Theropoda and Sauropodomorpha suggests that *S. pricei* is not a member of Eusaurischia. Most morphological characters discussed in previous phylogenetic studies cannot be assessed for *S. pricei* because of the incompleteness of the holotype and only known specimen. The phylogenetic position of *S. pricei* is constrained by that of its sister taxon *H. ischigualastensis*, which is known from much more complete material.

Key words: Dinosauria, Saurischia, Santa Maria Formation, Late Triassic, Brazil