ALCOVASAURUS LONGISPINUS AS A DACENTRURINE STEGOSAUR (DINOSAURIA) AND CONTRIBUTIONS TO THE DIAGNOSIS OF DACENTRURINAE

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Miragaia longicollum Mateus *et al.*, 2009 (Late Jurassic of Portugal) is a species of stegosaur based on a specimen consisting essentially of the anterior part of the skeleton. *Alcovasaurus longispinus* Galton and Carpenter, 2016 (Late Jurassic of Wyoming, USA) was defined on the basis of a stegosaur specimen first described in 1914 - but only the femur, spines and posteriormost caudal vertebrae were described before it was destroyed in a flood in the 1920s. In the latest phylogenetic analysis of Stegosauria, *A. longispinus* was found outside Eurypoda, due to the lack of known features shared with other stegosaur species.

A new specimen (MG 4863) from Atouguia da Baleia (Portugal), with representative anterior and posterior skeleton, was classified as *M. longicollum*, and is distinguishable from its sister taxon, *Dacentrurus armatus* Owen, 1875. The comparisons revealed four features shared only by *M. longicollum* and *A. longispinus* (transverse processes present in all caudal vertebrae, apple-shaped outline of mid and posterior caudal centra, neural arch of mid and posterior caudal vertebrae one third or less the height and width of the centrum, lateral ossification of the posterior rim of the posteriormost caudal centra) thus suggesting congenericity. Another three characters (mid and posterior caudal centra wider than tall, taller than long, with deeply concave lateral sides) were shared by both taxa as well as *D. armatus,* therefore could be diagnostic of Dacentrurinae. These results suggest that *A. longispinus* is a dacentrurine stegosaur, resolving its phylogenetic placement, and is the first evidence of Dacentrurinae in America.