

A NEW SPECIMEN AFF. *DACENTRURUS ARMATUS* (DINOSAURIA, STEGOSAURIDAE) FROM THE LATE JURASSIC OF PORTUGAL

Mateus, Octávio^{1,2}; Maidment, Susannah C. R.³ & Christiansen, Nicolai A.²

¹Dept. Earth Sciences (CICEGe-FCT), Universidade Nova da Lisboa, P-2829-516 Monte de Caparica, Portugal omateus@fct.unl.pt; ²Museu da Lourinhã, Rua João Luís de Moura, 2530-157 Lourinhã, Portugal; ³Department of Earth Sciences, University of Cambridge, Downing Street, Cambridge, CB2 3EQ, UK; current address: 1402 Norfolk Mansion, 17-21 Ly Tu Trong, District 1, Ho Chi Minh City, Vietnam.

A new specimen (ML433) tentatively ascribed to the stegosaurid dinosaur *Dacentrurus armatus* from the Upper Jurassic of Portugal is here reported. It was excavated in 1999 and 2001 in a road cut between the villages of Miragaia and Sobral, near Lourinhã, Portugal; 39°N, 9°W. The specimen was recovered from the Miragaia Unit, Sobral Formation, Lourinhã Group, which is dated as Upper Kimmeridgian-Lower Tithonian, Upper Jurassic. The Sobral Fm. is considered to lie above the *eudoxus* zone, which is 151.2-152.4 Ma. The specimen includes a nearly complete anterior half of a skeleton with partial cranium (right premaxilla, left nasal, right postorbital, right and left angulars and a partial left maxilla), fifteen cervical vertebrae (atlas-axis are absent) with associated ribs, two anterior-most dorsal vertebrae, both coracoids, scapulae, humeri, radii and ulnae, one intermedium, one metacarpal, three phalanges, 12 ribs, one chevron, one dermal spine and 13 dermal plates. This specimen, with at least 17 cervical vertebrae, has a longer neck than any stegosaur found to date. Stegosaurian dinosaurs are generally considered to be short-necked grazers or low browsing feeders but the long neck on ML433 may indicate a much higher browsing feeding strategy than has previously been hypothesized for stegosaurs. ML433 possesses eight additional cervical vertebrae relative to the ancestral condition represented by *Scutellosaurus* and *Scelidosaurus*, and more cervical vertebrae than was possessed by most sauropods. Neck elongation and cervical vertebral anatomy indicates evolutionary convergence with sauropods. The species is based upon an articulated skeleton, including the only known cranial remains from a European stegosaur.