



New titanosaurian (*Dinosauria*, *Sauropoda*) remains from the Mercedes Formation (Late Cretaceous) of Uruguay

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Titanosaurian sauropods are the most common Cretaceous vertebrates in South America, India and Madagascar. Titanosauria is considered the only sauropod clade which survived until the latest Cretaceous. In Uruguay, titanosaur remains from the Mercedes Formation (Campanian-Maastrichtian) were first discovered in the 1920s, being the basis of the recognition of Late Cretaceous deposits by the German palaeontologist F. von Huene. However, differing with purported titanosaur eggs and eggshells (Faveololithidae), bones were never found included within the sandstones, but in meteorized levels or even in the soil. Thus, the connexion with the Mercedes Formation was dubious. Herein we report the finding of abundant sauropod bones (which are silicified, like the remaining sauropod remains from Uruguay) belonging to several individuals. The fossil site (Insaurral Creek, Florida province) has already yielded a partial sacrum and fibula 25 years ago. The new materials include four caudal vertebrae, a proximal ulna, a proximal tibia, three proximal femora, two distal femora and several metacarpal fragments. The strong procoely of the caudal vertebrae suggest the fossils belonged to a derived titanosaurian sauropod. In this fossil site, immediately underlying the soil there is a pink-gray, quartzofeldspathic conglomeratic sandstone which is directly associated with the bones. Indeed, bone fragments included in the sandstone were observed. This is the first record of sauropod bones undoubtedly yielded by the Mercedes Formation. Relics of this unit, overlying a Paleoproterozoic granitic-gneissic basement, are the only Phanerozoic deposits in this area.

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