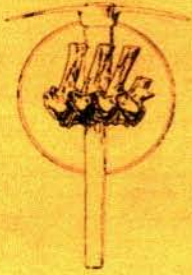


Volume 22, Supplement to Number 3
19 September 2002



**JOURNAL of
VERTEBRATE PALEONTOLOGY**

ABSTRACTS OF PAPERS

SIXTY-SECOND ANNUAL MEETING
SOCIETY OF VERTEBRATE PALEONTOLOGY
SAM NOBLE OKLAHOMA MUSEUM OF NATURAL HISTORY
UNIVERSITY OF OKLAHOMA
NORMAN, OKLAHOMA

OCTOBER 9-12, 2002

SOCIETY OF VERTEBRATE PALEONTOLOGY

ISSN 0272-4634

A NEW SAUROPOD FROM THE APTIAN-ALBIAN OF BRAZIL AND ITS PHYLOGENETIC RELATIONSHIPS

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A new species of a sauropod from Brazil is presented herein. It was found in Aptian-Albian strata from the Itapecuru Formation (Paraná Basin, State of Maranhão), North of Brazil. The region is situated in the eastern limits of the Brazilian Legal Amazon. The fossil was found in a lithofacies that was interpreted as proximal fluvial mouthbars deposits in a deltaic environment. The Itapecuru specimen is known from a few, but diagnostic postcranial skeleton comprising several incomplete vertebrae, isolated centra, neural spines, chevrons, both scapulae and a complete ilium.

The phylogenetic relationships of the new taxon were investigated by a cladistic analysis using the *ie** option of Hennig86, version 1.5. The analysis yielded one most parsimonious tree with 93 steps and a consistency index of 0.61, and retention index of 0.78: *Camarasaurus* (*Brachiosaurus* (*Andesaurus*, Titanosauridae)) (*Haplocanthosaurus delsi* (*Haplocanthosaurus* priscus (*Rayososaurus tessonei* (*Apatosaurus* (*Diplodocus*, *Barosaurus*)) (*Dicraeosaurus* (*Amargasaurus*, new taxon)). The new taxon shares five characters to support its inclusion in Dicraeosauridae, and it represents the first occurrence of a Dicraeosauridae in Brazil and the latest record of this taxon in South America.

The dicraeosaurids were previously known from the Upper Jurassic to Neocomian of Gondwana. The presence of the Itapecuru specimen in Aptian-Albian beds of northern South America extends the stratigraphic and geographic distribution of this taxon. The close relationships to *Amargasaurus cazanui* Salgado & Bonaparte, 1991 and a well-developed proportionally neural spine of the axis, lead us to conclude that this new sauropod presented an elevated sailback-like cervical crest. It is proposed that both should be included on a new supra-generic taxon, which is supported by the presence of a very elongated neural spine of the axis.