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Asterostemma Depressa! A Glyptodont From the Miocene of Northern Chile

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Poster Presentation P26

ASTEROSTEMMA DEPRESSA! A GLYPTODONT FROM THE MIOCENE OF NORTHERN CHILE

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Glyptodonts are a group of extinct large, armadillo-like mammals that were distributed throughout the Americas during the Miocene Period of the Cenozoic Era (ca. 18 millions years ago). Although most glyptodonts from this period were relatively small and "primitive", one species Asterostemma depressa was larger than most species and is known from sites in Patagonia (so. Argentina). I describe here the results of an examination of a partial fossil skeleton of a glyptodont collected from the Chucal (formation) of northern Chile. The fossil collection from Chucal is rich in ungulate groups such as notoungulates and litopterns, but it is unusually poor in armadillos and glyptodonts, both of which are abundant in temporally equivalent sites of southern South America. The species of fossil mammals recovered from Chucal suggest a Santacrucian South American Land Mammal Age (SALMA) for the fauna. During the Santacrucian SALMA (about eighteen million years ago, during the early Miocene), most glyptodonts still were small and rather 'primitive'. This paper describes an A. depressa from the Chucal fauna of northern Chile based on one partial skeleton, Analysis of the left mandible (jaw), several neck vertebrae, articulated foot bones, a chevron (accessory vertebra of the tail), and various free osteoderms. The osteoderms and mandible were valuable in this identification, as A. depressa is characterized by a depressed central figure of the osteoderms and by lower front teeth that are neither rounded nor reniform. The large size of the fossils supports referral to this genus. The Chucal fauna is the first fauna from the Chilean Altiplano region, and at present this Asterostemma depressa specimen is the only glyptodont recovered from Chucal. At present, it also is the only A. depressa known from a location other than Patagonia.