

## Juvenile specimens of *Araripemys* Price, 1973 (Pelomedusoides, Araripemydidae) from the Crato Formation, Araripe Basin

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**Background.** The Santana Group of Araripe Basin has an important turtle fauna in which five monotypic genera are formally described, all from the Albian Romualdo Formation.

*Araripemys barreto* is the unique identified species that has been found in the Crato and Romualdo formations of the Santana Group. Herein, we report two juvenile araripemydid provided from the light-beige colored laminated limestone from the Crato Formation: AMNH 30651 and MN 4893-V.

**Methods.** The specimens have been analyzed through traditional paleontological methods. For taxonomic and morphological identification were realized comparisons with living and extinct taxa, moreover, specialized bibliography and photos.

**Results.** The small size of the specimens (among 40-50 mm) and its poor degree of ossification with costal bones not fused suggest that both are juvenile individuals. AMNH 30651 is identified as *Araripemys* cf. *barreto* and can be distinguished to other turtles from Araripe Basin based on the follow characteristics: (1) long vertebral body; (2) long neck; (3) the angle of curvature of the axillary and inguinal buttress; (4) mesoplastron absent; and (5) arrow-shaped unguals. MN 4893-V is also identified as *Araripemys* cf. *barreto* and can be distinguished from the other turtles from Araripe based on characteristics 2, 3, and 5 (described above) plus (6) a nearly oval skull in dorsal view with closely spaced orbits; and (7) a long vertebral body.

**Discussion.** Juvenile turtles are rare in the fossil record. Although the description of these two incomplete specimens does not completely elucidate the ontogeny of this taxon, the analysis of these specimens yield relevant information about taxonomic characters such as: skull with nearly oval shape in dorsal view with closely spaced orbits; long vertebral body; long neck; the angle of curvature of the axillary notch; and unguals arrow-shaped. The small size of the

specimens (40-50 mm) and its poor degree of ossification of unfused costal bones indicates that both are very young individuals. Some researchers postulate that the paleoenvironment of the Crato Formation was similar to mangroves, which is corroborated by the presence of juvenile turtles and fishes, anurans and insects. *Araripemys barretoii* was also recorded in the Romualdo Formation, which represents a lagoon. The fact that this turtle is found in those quite distinct paleoenvironments suggests that this species could be tolerant to distinct salinities levels.

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