

New data on the anatomy and relationships of the Paleocene crocodylian *Akanthosuchus langstoni*

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The phylogenetic relationships of the Paleocene crocodylian *Akanthosuchus langstoni* are assessed using published data matrices and morphological data from the holotype and referred specimens. Cladistic analyses indicate that *Akanthosuchus* is unequivocally nested within Alligatoroidea. Weak support from a majority rule consensus tree indicates that *Akanthosuchus* may be more closely allied with alligatorines than with caimanines, but in the strict consensus tree these relationships remain ambiguous. There is no evidence from phylogenetic analyses to support the hypothesis that *Akanthosuchus* represents the postcrania of the Paleocene crocodylians *Navajosuchus* or *Ceratosuchus*. Growth marks observed in histological sections of osteoderms of the holotype of *Akanthosuchus langstoni* indicate that it was at least eight years old at the time of death. Although the individual may not have been fully mature at the time of death, lineage dwarfism cannot be ruled out as a possible reason for its relatively small size.

Key words: Crocodylia, Alligatoroidea, *Akanthosuchus*, osteoderms, dwarfism.

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