

## Gobiosuchus kielanae (Protosuchia) from the Late Cretaceous of Mongolia: anatomy and relationships

Halszka Osmólska, Stephane Hua, and Eric Buffetaut *Acta Palaeontologica Polonica* 42 (2), 1997: 257-289

The original description (Osmólska 1972) of the skull, postcranial skeleton, and armour of a protosuchian, Gobiosuchus kielanae (Gobiosuchidae Osmólska), is supplemented and revised on the basis of additional specimens from the type locality and horizon Bayn Dzak, ?early Campanian Djadokhta Formation). It is suggested that Gobiosuchus kielanae was an entirely terrestrial and probably insectivorous animal. Assignment of Gobiosuchus to Protosuchia is supported by the following characters: basisphenoid larger than basioccipital; extensive ventral contact between quadrate and basisphenoid; pneumatic pterygoid; quadrate condyles only slightly protruding beyond posterior margin of braincase, and lack of retroarticular process. Gobiosuchus differs from other protosuchians in the following features: snout wider than high; palatal processes of premaxillae contacting along their entire length; closed supratemporal and mandibular fenestrae; basioccipital extending dorsally onto occiput and separating on each side ventromedial part of quadrate from contact with otoccipital; posterolateral process of squamosal extended far behind mandibular articulation; presence of cranioquadrate passage; descending process of prefrontal contacting palate; armour of sutured osteoderms encasing at least some of long limb bones; presence of peculiar accessory osteoderms in regions of articulation of limbs with girdles, and more than two longitudinal rows of dorsal osteoderms.

**Key words:** Crocodyliformes, Protosuchia, Gobiosuchidae, Gobiosuchus, osteology, habits, Late Cretaceous, Mongolia.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see <u>creativecommons.org</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

