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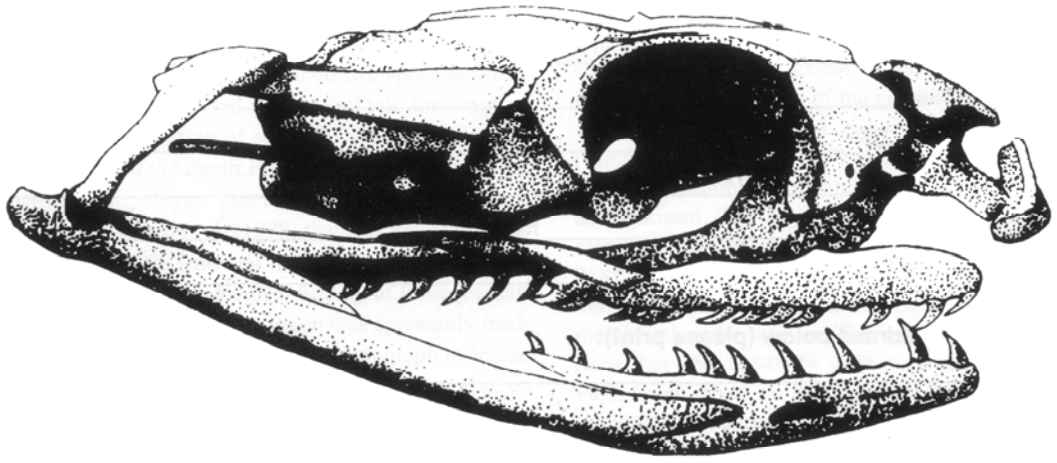

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A NEW SPECIES OF XINJIANGCHELYID (TESTUDINES: CRYPTODIRA: XINJIANGCHELYIDAE) FROM THE CRETACEOUS OF SOUTHERN INDIA

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A new fossil turtle of the family Xinjiangchelyidae, *Xinjiangchelys uttatturensis* is being described from the Cretaceous of southern India. The partially preserved unique type was collected from near Uttattur in Tamil Nadu State. The new species is diagnosed by the following suite of characters: external surface of carapace ornamented with raised incipient nodes forming striations, eight neural bones, moderately broad vertebral scutes and absence of plastral fontanelles in presumed adult.

Key words: Xinjiangchelyidae, *Xinjiangchelys uttatturensis*, new species, Cretaceous, south India.

Plesiochelyidae, a family of early fossil turtles, appeared suddenly in the Late Jurassic limestones of western Europe. Although Gaffney (1984) initially hypothesized it to be a member of the Chelonioidea and the Polycryptodira, Hirayama and Suzuki (1985), and Gaffney and Meylan (1988) subsequently treated the family as a sister group of Centrocryptodira.

Gaffney (1975) reviewed the contents of the genus *Plesiochelys* Rutimeyer (1873) and concluded that two species were valid: *Plesiochelys planiceps*, presumed to be from the Late Jurassic of the Isle of Portland, Great Britain and *P. etalloni*, from the Late Jurassic of France and Switzerland. Young and Chow (1953) and Yeh (1963; 1973) reported *Plesiochelys* from the Lower Cretaceous/Upper Jurassic of China, but based their descriptions on broken shells, which, according to Gaffney (op. cit.), were insufficient for generic identification. The genus *Xinjiangchelys* was established by Yeh (1986) to accommodate *X. junggarensis* Yeh, 1986 from the middle Jurassic of China, which was subsequently treated as a synonym of "*Plesiochelys*" *latimarginalis* Young and Chow (1953), which is also from the Jurassic. Nessov and Kaznyshkin (1985) and Nessov (1986) described an adocid turtle from Kirghizia, Central Asia, which they tentatively assigned to the genus *Plesiochelys*. These are now considered to belong to the genus *Xinjiangchelys* Yeh, 1986. According to Kaznyshkin et al. (1990), Narmandakh (1991) and Nessov (1995), despite great superficial similarities, the families Plesiochelyidae and Xinjiangchelyidae can be separated on the basis of cranial characters.

The fossil turtles of the Indian region have been reviewed by Das (1991, 1995), and remains from the Cretaceous are few. Blanford (1862) failed to collect turtles from the Uttattur sediments, and concluded that the report of turtle remains from these rocks by Muzzy (1856) were, in fact, concretionary nodules. The first xinjiangchelyid from the Indian subcontinent is reported here and is assigned to a new species, based on a nearly complete shell from the Cretaceous of Tamil Nadu, southern India, which was acid-prepared.

Acronyms to shell measurements taken include: SH (shell height or shell depth); SCL (straight carapace length); SCW (straight carapace width); ALO (anterior lobe width); PLO (posterior lobe width); BL (bridge length). Shell component nomenclature is after Dundee (1989).

SYSTEMATIC PALEONTOLOGY

Order Testudines Linnaeus, 1758
Infraorder Cryptodira (Cope, 1868)
Family Xinjiangchelyidae Nessov, 1990
Genus *Xinjiangchelys* Yeh, 1986
***Xinjiangchelys uttatturensis* sp. nov.**
(Figs. 1–3)

Material. One specimen, in the collection of the Geological Survey of India, Calcutta, number C3

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