

First evidence of a Semionotiform fish (Actinopterygii, Holostei) from the Late Jurassic Phu Kradung Formation of Nakhon Ratchasima, northeastern Thailand

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So far, the Mesozoic Semionotid fish record from the Khorat Plateau has been collected mainly from the locality of Phu Nam Jun, Phu Kradung Formation. This locality contains an abundant assemblage with various mode of preservation of the carcasses. The fishes from Phu Nam Jun are referred to at least two genera; *Isaniichthys palustris* (Cavin and Suteethorn, 2006) and '*Lepidotes*' *buddhabutrensis* (referred to a new genus by Cavin *et al.*, in press). Here we describe a new semionotiform fish on the basis of an impression from a slab of sandstone from the Phu Kradung Deposit of Ban Tha Rue, Wang Nam Kheaw District. The present fish shows a new combination of morphological features different from characters of both taxa from the Phu Nam Jun locality: a hump back with small number of dorsal scales with their extremity forming posterior spines, and the scales of the ventral edge with posterior spine; the squamation shows less scales than in the Phu Nam Jun genera, for instance 36 scales along the lateral line and 17 dorsal ridge scales with the anus surrounded by two large scales. A surprising character is the position of pelvic fin, which appears to be inserted relatively high on the flank and not along the ventral midline as usual in semionotiform. The ossifications of the skull are composed of a ca 6 infraorbitals contacting the orbit and a large number of suborbitals arranged in one row. Moreover, the specimen shows distinct characters of its jaw, such as small crushing teeth occurring on the anterior tip of its jaws only. The occurrence of crushing teeth indicates that the fish has a tritorial dentition as observed in various taxa from the Triassic to the Cretaceous.

This preliminary description indicates that this specimen should be included in a new taxon, and strengthens again the morphological diversity of the 'semionotiforms'. Understanding the phylogenetic relationships between the Late Jurassic and the Cretaceous 'semionotiforms' is an important goal for future studies