New occurrence of tiny semionotid (Actinopterygii, Neopterygii) from the Khok Kruat Formation of Khorat Group in Thailand

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The Khok Kruat Formation is the youngest of the five formations of Khorat Group, dated as Aptian on the basis of palynomorphs and of the hybodont shark *Thaiodus*. It has also yielded abundant vertebrate fauna such as dinosaurs (*Psittacosaurus sattayaruki*, iguanodontid, sauropod and theropod), crocodiles (*Khoratosuchus jintasakuli*), turtles (*Kizylkumemys khoratensis*), and fresh water sharks (*Acrorhizodus khoratensis*). So far the bony fish record is represented fragmentary remains consisting of thousands of isolated ganoid scales refer to two morphotypes on the basis of the general morphology and by isolated button –like crushing teeth referred to *Lepidotes*.

In the present contribution we report the first occurrence of tiny semionotiform fish recovered in a sandstone quarry at Ban Saphan Hin, Nakhon Ratchasima Province, Thailand. The specimen was embedded in reddish brown sandstone and mudstone interbedded with silt pebbles. The outcrop is considered as belonging to the Khok Kruat Formation.

The specimen is small, 7.3 cm long, 2.6 cm width, and lacks the head. It consists of a squamation showing articulated ganoid scales with smooth surface. Only the dorsal fin is present. However we can estimate the position of pelvic and anal fins by examination of the pattern of the scales along the ventral rim. The scales show a variety of shape according to their position and some show peg and socket articulation. There are no dorsal ridge scales. There are a total of 23 dorsal scales, which represent the same number of transverse scales, and about 37 scales along the body. Although the specimen has a very small size compared to *Lepidotes buddhabuternsis* from Phu Kradung Formation, the number of dorsal scales is included in the range of *Lepidotes buddhabuternsis*. This new occurrence confirms that semionotiforms were probably the most diversified bony fish lineage during the Early Cretaceous in Thailand.

Keywords: semionotid, Khok Kruat Formation, Khorat Group, Thailand