Articulated cranium of *Onchopristis numidus* (Sclerorhynchidae, Elasmobranchii) from the Kem Kem bed, Morocco

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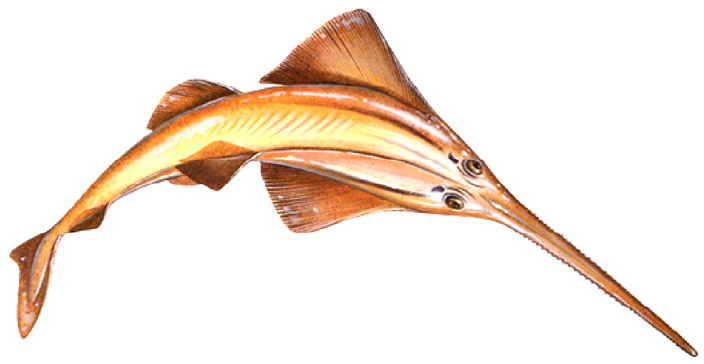

Introduction

Sclerorhynchidae is one of the sawfish groups known from the Lower Cretaceous to the top of the Upper Cretaceous. Except few skeletons from the Upper Cretaceous of Lebanon, articulated skeletons of Sclerorhynchidae are rare and restricted to very few species (Cappetta, 1980). Most of the taxa have been described on the basis of disarticulated rostral or oral teeth. The association of these two different elements under the same species name is often hypothetical. Thus, the new semi-articulated specimen of this family found in the Kem Kem beds (Fig. 1-3), by private collector and hosted at the Muséum national d'Histoire naturelle (MNHN) is important because it shows the rostral and the oral teeth in association in a single specimen. This fossil has been found in the Kem Kem beds (Cenomanian, Upper Cretaceous) of south-eastern Morocco. It could be assigned, without doubt, to *Onchopristis numidus* (Haug, 1905). This specimen shows roughly the rostrum, the skull roof, the meckel cartilage with teeth, the synarcual and some vertebrae.

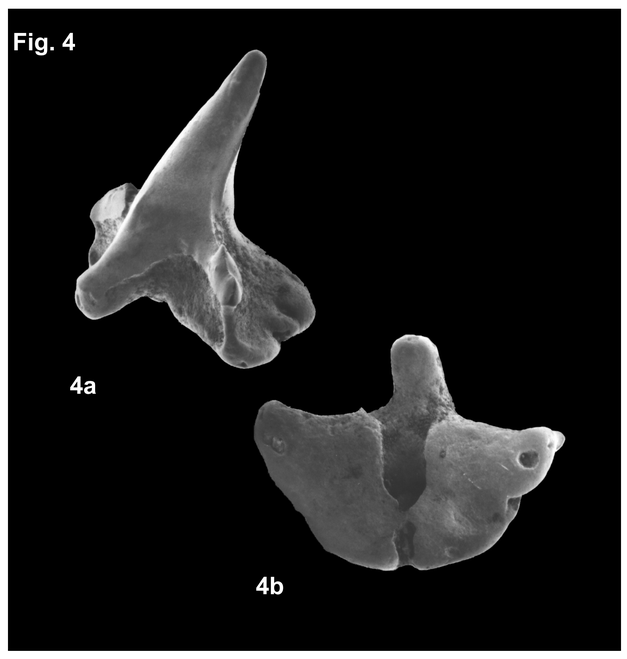

Fig. 1. Ventral view of an articulated *Onchopristis numidus* (Haug, 1905) from the Cenomanian (Upper Cretaceous) of Southeastern Morocco.
Fig. 2. Details of the rostrum of *Onchopristis numidus* (Haug, 1905), showing some rostral teeth.
Fig. 3. Details of mouth of *Onchopristis numidus* (Haug, 1905), showing the Mekel cartilage with teeth.
Fig. 4. Oral tooth of *Onchopristis numidus* (Haug, 1905) from the Cenomanian (Upper Cretaceous) of Southeastern Morocco**. 4a**. Labial view, **4b**. basal view.

History

Haug (1905) described from the Djoua Fm (?Albian/Cenomanian) of the Djoua Valley (Algeria), rostral teeth of Sclerorhynchidae that he named *Gigantichthys numidus*. When Stromer (1927) studied the fish fauna from Baharya Fm (Cenomanian) of Egypt, he described the same kind of rostral teeth that he assigned to the same species. Stromer changed the name of the *Gigantichthys* (preoccupied by a placoderm) for a new genus, *Onchopristis*. This author described also partial rostrum of *O. numidus*. In the same paper, Stromer erected, for small oral teeth, the species *Squatina aegyptiaca*. Werner (1989) proposed a new genus for this species *Sechmetia*. Cappetta since 1980 has attributed this type of teeth to *O. numidus* and claimed in 1991 that *Sechmetia* was a *nomen nudum*.

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New material

The new articulated specimen of *O. numidus* (Fig. 1-3) from the Kem Kem beds, shows on its rostrum, numerous classical teeth of this species. More important, oral teeth are present on the Mekel cartilage. These oral teeth headlight definitively the fact that they can not be attributed to *Sechmetia aegyptiaca* Werner, 1989, but definitely referred to *Onchopristis numidus* (Haug, 1905).

Vertebrae attributed to *Platyspondylus foureaui* Haug, 1905 have been found in the same beds than *O. numidus*. According to Tabaste (1963) and the new articulated specimen from the Kem Kem beds, they need to be attributed to *O. numidus***.**

O. numidus is known, behind the Djoua and Baharya formations, and the Kem Kem beds (Lavocat, 1948; Tabaste, 1963) from the Upper Cretaceous (probably Cenomanian) of Gara Samani, Algeria (Broin *et al*., 1971), the Farak Fm, Cenomanian of North Niger (Lapparent, 1953; Dutheil, 2001), and the Cenomanian of Libya (Lefranc, 1958).