

## THE OCCURRENCE OF THE EXTINCT SHARK GENUS *SPHENODUS* IN THE JURASSIC OF SICILY

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During the systematic revision of some historical collections containing Mesozoic ammonites, housed at the "G.G. Gemmellaro" Geological Museum of the Palermo University, a fossil shark's tooth has been discovered.

This specimen, indicated as *Lamna* in the original catalogue, can be attributed to the genus *Sphenodus*, an extinct cosmopolitan shark ranging from Lower Jurassic rocks to the Paleocene.

The specimen is part of the Mariano Gemmellaro Collection which mainly consists of Middle-Upper Jurassic ammonites coming from Tardàra Mountain, between Menfi and Sambuca di Sicilia (Agrigento Province, Southwestern Sicily). Some of the ammonite specimens were listed, but not illustrated, by M. Gemmellaro in a note of 1919.

The succession described in this area consists (from bottom to the top) of Lower Jurassic shallow-water carbonates followed by condensed ammonitic limestones of "Rosso ammonitico-type" (Middle-Late Jurassic in age), Calpionellid limestones (Upper Jurassic-Lower Cretaceous) and cherty calcilitites of Scaglia-type (Upper Cretaceous-Eocene).

Since the exact stratigraphic level from which the shark tooth comes is not recorded, a thin section was made of the rock matrix surrounding the tooth.

The sedimentological and paleontological analysis of the thin section has highlighted the presence of a microfacies characteristic of the Upper Jurassic condensed deposits of Rosso ammonitico-type, data that fits very well with the geology of the Tardàra area.

The study of the Tardàra shark's tooth has provided both the stimulus and opportunity to undertake a taxonomic review of the Jurassic specimens of *Sphenodus* collected from a range of Sicilian localities (Gemmellaro G.G., 1871; Seguenza G., 1887; Di Stefano & Cortese, 1891; Seguenza L., 1900; De Gregorio A., 1922) that, to date, have not been re-examined in the light of more recent scholarship.

In particular, the specimens described and illustrated by G.G. Gemmellaro (1871), and stored in his eponymous museum, have been revised with the aim of providing a contribution to our knowledge of the genus *Sphenodus* in the Sicilian Mesozoic successions.

### References:

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