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New data on the ichthyosaur *Platypterygius hercynicus* and its implications for the validity of the genus

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The description of a nearly complete skull from the late Albian of northwestern France reveals previously unknown anatomical features of *Platypterygius hercynicus*, and of European Cretaceous ichthyosaurs in general. These include a wide frontal forming the anteromedial border of the supratemporal fenestra, a parietal excluded from the parietal foramen, and the likely presence of a squamosal, inferred from a very large and deep facet on the quadratojugal. The absence of a squamosal has been considered as an autapomorphy of the genus *Platypterygius* for more than ten years and has been applied to all known species by default, but the described specimen casts doubt on this putative autapomorphy. Actually, it is shown that all characters that have been proposed previously as autapomorphic for the genus *Platypterygius* are either not found in all the species currently referred to this genus, or are also present in other Ophthalmosauridae. Consequently, the genus *Platypterygius* must be completely revised.

Key words: Ichthyosauria, Ophthalmosauridae, *Platypterygius hercynicus*, Cretaceous, Saint-Jouin, France.

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