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NEW JURASSIC TELEOSTEAN FISHES FROM THE LATE JURASSIC OF BAVARIA

The famous Late Jurassic fishes from the Southern Franconian Alb in Bavaria in general, and from the Solnhofen Formation in particular, are known for a long period of time. They are usually labelled in museum's collections as coming from Solnhofen what it is misleading. They can come from the Solnhofen Formation (Malm Zeta 2) as well as from the underlying Geisental Formation (Malm Zeta 1) and the Mörsheim Formation (Malm Zeta 3) (Viohl, 1996; Arratia 1997). These fishes have been subject of intensive research at the end of the 19th and at the beginning of the 20th centuries, and after that it was generally accepted that there was nothing new to learn about them. Many of these fishes have been collected in a variety of localities (Fig. 1) such as Solnhofen, Eichstätt, Blumenberg, and Kelheim.

The Late Jurassic fishes from the region reveal a great diversity including, elasmobranchs, actinistians, and actinopterygians. The most diverse ones are the actinopterygians, with groups such as the chondrosteans, semionotiforms, amii forms, pycnodontiforms, caturiforms, pachycormiforms, aspidorhynchiforms, and teleosts (for a general overview see Frickhinger, 1991). The teleosts are a significant component of the fauna from the Southern Franconian Alb. During many years most of the small teleosts were thought to be *Leptolepis* until Nybelin (1974) demonstrated that under such a name are different teleostean genera. Consequently, Nybelin (1974) created the teleostean genera *Ascalabos*, *Leptolepides* and *Tharsis*. In addition, fossil teleosts such as the elopomorph *Anaethalion*, the ichthyodectiforms *Pachythrissops* and *Thrissops*, and numerous species assigned to *Pholidophorus* were recognized.

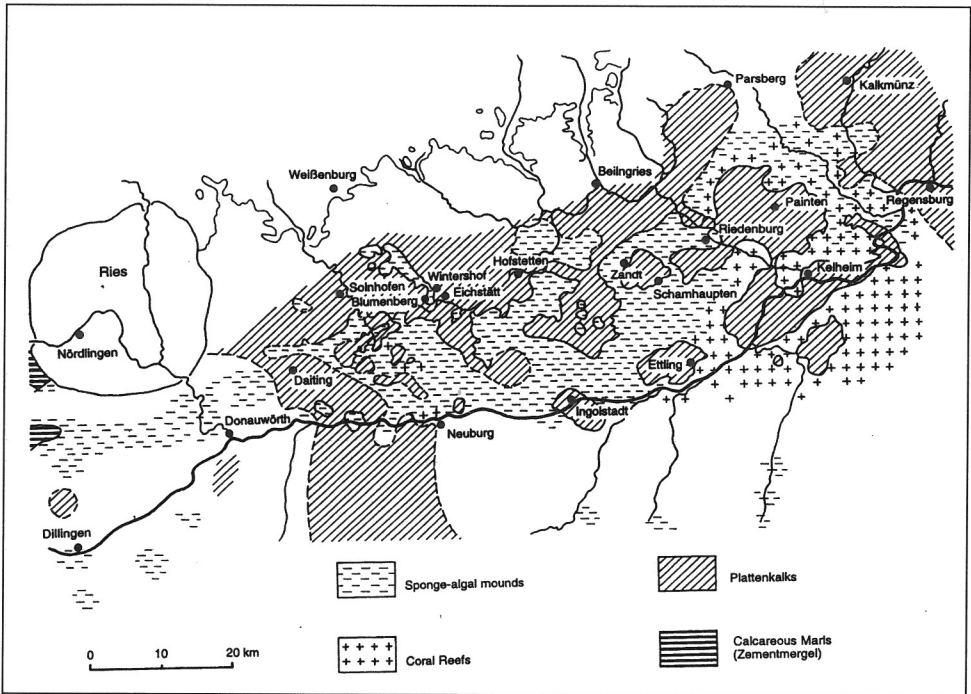
Nybelin's (1964, 1967, 1974, 1979) studies and results were a significant step to push forward revisions of the old collections of the so-called Solnhofen fishes. In addition, it opened the interest in prospecting some old and new localities in Bavaria. During the last twenty years a few new teleosts have been described. For instance, *Eichstaettia* from Malm Zeta 2 of Eichstätt (Arratia, 1987a) and *Daitingichthys* from Malm Zeta 3 of Daiting (Arratia, 1987a); both are probably related to *Anaethalion* (Arratia, 1991). Two species of the "salmoniform" *Orthogonikleithrus* from Malm Zeta 2 of Zandt and Ettling (Arratia, 1987b, 1997), and a probable ostariophysan, *Tischlingerichthys*, from Malm Zeta 3 of Mühlheim (Arratia, 1997). In addition, the important finding of leptocephalous larvae and / or transforming leptocephali from Malm Zeta 2 of Blumenberg was reported by Arratia (1997).

During the last years, excavations in Brunn in the eastern part of the Southern Franconian Alb (Röpfer & Rothgaenger, 1997), and in Schamhaupten (e.g., Thies & Zapp, 1997) and

Daiting (Fig. 1) have produced interesting new material. The goals of this contribution are to report new teleosts from the last two localities and discuss their importance for systematics.

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Distribution of Plattenkalk basins and reef areas in the Southern Franconian Alb during Early Tithonian times (slightly modified from Viohl, 1996).

