

Silurian thelodonts from the Niur Formation, central Iran

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Thelodont scales are described from the Silurian Niur Formation in the Derenjal Mountains, east central Iran. The material studied herein comes from four stratigraphic levels, composed of rocks formed in a shallow water, carbonate ramp environment. The fauna includes a new phlebolepidiform, *Niurolepis susanae* gen. et sp. nov. of late Wenlock/?early Ludlow age and a late Ludlow loganelliiform, *Loganellia* sp. cf. *L. grossi*, which constitute the first record of these thelodont groups from Gondwana. The phlebolepidiform *Niurolepis susanae* gen. et sp. nov. is diagnosed by having trident trunk scales with a raised medial crown area separated by two narrow spiny wings from the lateral crown areas; a katoporodid-type histological structure distinguished by a network of branched wide dentine canals. Other scales with a notch on a smooth rhomboidal crown and postero-laterally down-stepped lateral rims have many characters in common with *Loganellia grossi*. Associated with the thelodonts are indeterminable acanthodian scales and a possible dentigerous jaw bone fragment. This finding also provides evidence of a hitherto unknown southward dispersal of *Loganellia* to the shelves of peri-Gondwana.

Key words: Thelodonti, Phlebolepidiformes, Loganelliiformes, palaeobiogeography, Silurian, Niur Formation, Iran.

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