

The Triassic to Early Jurassic shallow-water carbonates of the Rraphsa-Tamara section (NW Albania) as a part of the Adriatic-Dinaric carbonate platform

Schlagintweit, F.¹, Gawlick, H.-J.¹, Missoni, S.¹, Lein, R.² Vukaj, S.³ & Hoxha, L.⁴

1 University of Leoben, Department for Applied Geosciences and Geophysics: Chair of

Prospektion and Applied Sedimentology, Peter-Tunner-Str. 5, A-8700 Leoben

2 University of Vienna, Centre of Earth Sciences, Althanstr. 14, A-1090 Vienna

3 Geological Service of Albania, Shkodra, Albania

4 Geological Survey of Albania, Tirana, Albania

Following uniform Late Triassic peritidal carbonates and dolomites (“Hauptdolomit” or Dolomia principale) Early to Middle Liassic shallow-water limestones are widely distributed along the Adriatic-Dinaric carbonate platform (ADC): North-Italy (Calcarei grigi), Slovenia, Croatia, Serbia-Montenegro and Greece. All these occurrences display distinctive macro- and microscopically features as well as typical microfossil associations. Characteristic for the Tethyan realm, this lithofacies is recently also reported from the Iberian domain. Examples for the occurrences of Early/Middle Liassic shallow water limestones in the Dinaric realm are compiled.

For the first time, a continuous and conformable profile (thickness ~ 150 m) of Late Triassic to Middle Liassic neritic dark brownish-coloured dolomites and limestones is described in Albania. This Rrapsha-Tamara named section outcropping along the mountainous road north of Shkodra near Montenegro in the northwestern part of Albania (Albanian Alps) and belong tectonically to the external Albanides. The microfacies of the exposed sequence (wacke-, pack- to mudstones, lamination, fenestral fabrics, internal breccias) indicates peritidal to subtidal sedimentation in a restricted inter- to supratidal environment. A stacking of the succession in several peritidal parasequences, as described from the Early Liassic of the Western Dinarides in Croatia seems possible, but not directly evidenced, e.g. through bed-by-bed sampling.

Starting with Late Triassic strongly recrystallized dolomites, the succession stratigraphically comprises the *Lituosepta compressa* and *Orbitopsella* lineage zones of benthic foraminifera (Late Sinemurian to Pliensbachian), the highest parts can be assigned to the Toarcian although not dated directly. The Triassic/Liassic (T/J) boundary cannot be fixed micropalaeontologically, also the lower part of the investigated profile (“Lower Liassic”) is devoid of microfossils. The middle part of the section contains a diverse association of benthic foraminifera which according to Nikler and Sokac (1968) “*qualifies the Middle Liassic the most fossiliferous Jurassic member*”. Lithologically the T/J boundary is marked by a sharp change from dolomites to a dominance of limestones presumably connected with a hiatus between the both units. In the middle and upper part of the outcropping succession lithotid bivalves occur. Besides benthic

foraminifera calcareous algae are present mainly with *Thaumatoporella parvovesiculifera* (Raineri) and *Palaeodasicladus mediterraneus* (Pia).

The stratigraphic occurrence of "Lithiotis" limestones in the Dinaric realm is not constant (Geyer, 1977). Whereas in Slovenia they occur in one distinct horizon ("lithiotid horizon", Pliensbachian, Buser and Debeljak, 1995), seven horizons within the Middle Liassic were reported from Croatia by Nikler and Sokac (1968). Most often, they occur as in the Rrapsha-Tamara section as debris limestones, floatstones to bioclastic packstones. In-situ "Lithiotis" reefs or build-ups with thicknesses of more than 10 m were reported from other parts of the ADC.

As a result of our studies we see a continuation of the Adriatic platform from the Dinarids to Albanides in Albania, poorly investigated at the moment, helping to reconstruct the paleogeography of the Adriatic platform (e. g., Vlahovic *et al.*, 2005).

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