Correlation of Mesozoic lithostratigraphic units of the East Alpine Bajuvaric and Tirolic units and the North-eastern part of the Transdanubian Range

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The Transdanubian Range is the only tectonic unit which has preserved the original Mesozoic transitional connection with both the Southern and Eastern Alps. The peculiarity of this transitional character is that the large part of the Upper Jurassic and Lower Cretaceous formations in the north-eastern part of the Transdanubian Range are identical with those of the Juvavic, Tirolic, in part of the Bajuvaric tectonic units, while the relationship with the Southern Alps is restricted to the Southern Bakony. The separation of the Southern Bakony and the Gerecse supervened in the early Late Jurassic.

After the Variscan orogeny large areas have been flooded during the Early Triassic as a result of the expansion of the Tethyan Ocean, when the starting clastic sedimentation is replaced by dominantly shallow marine carbonate environment. Therefore, similar formations are found on extremely large areas of the Alpine-Carpathian-Dinaric-Vardar Zone with smaller or larger differences in the internal basin environments. Here we focus the similarity of Mesozoic formations of the Northern Calcareous Alps and the Transdanubian Range only. The Middle and Late Triassic time almost all areas belonged to the lagoonal and reefal facies belt of the carbonate passive margin of the Tethyan Realm. The basic significance of Triassic succession of both the Alpine and the Transdanubian Ranges is the predominance of the carbonate platform, interrupted locally by shallow basinal marls in the Middle and Late Triassic times. The formations derived from the carbonate platforms with some basins within them can be correlated easily.