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Rock types of Roman stonemason workshops on the southern outskirts of Emona (present-day Ljubljana) – Ig area

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Having a small proportion of imported rock, most of the natural stone used in the Roman colony Iulia Emona (Italia, Regio X; present day Ljubljana) and in smaller settlements in its vicinity is of local origin. Different types of Jurassic, Cretaceous and Tertiary limestone were used, but the precise locations of antique quarries are mostly unknown. Lower Jurassic limestone was quarried in the present village of Podpeč and presumably also in the Podutik area. Another source of Jurassic natural stone was the area around the village of Staje near Ig, where Sinemurian limestone of the Podbukovje Formation is exposed (Rožič et al., 2018). Roman stelae, which were recovered of the Ig area, hold an important role in Slovenian archaeology. Lozić (2009) investigated typology of 15 most important and well-preserved stelae and showed that they belong to three formal types. As all are dated to the same period, she suggested that this reflects different styles used by two or three different stonemasonry workshops. To further investigate the usage and provenience of natural stone of the Ig area, we determined the lithological composition of the mentioned stelae.

Thin sections were made from previously studied stelea and investigated under optical polarizing microscope. Sedimentological and foraminifera stratigraphy determination of the samples composition were subsequently compared with limestone from confirmed and presumed antique quarries in the area to determine the provenience of the monuments.

We determined 7 macrolithotipes and 9 microfacies types. On basis of foraminifera, a Sinemurian age of the limestone is presumed for most of them. The most likely source of the stone is the area of Staje. Alternatively, a slightly more distant origin from the 8 km distant quarry at Podpeč is possible, but less likely due to the darker colour and a slightly younger age of the latter. Based on the facies, a small number of monuments belong to the uppermost Lower to Middle Jurassic Laze Formation. The source of this limestone remains unknown. According to field observations, one possible source is an abandoned modern-time quarry located SE of Podpeč. If we compare the determined lithological types with the three typology types of stelae, no grouping of rock types can be seen: stelae made from Sinemurian limestone belong to all three types, and limestone of the Laze Formation was found in stelae from two different typological groups. This implies that suggested antique stonemason workshops of the area used stone from different quarries active at the same time.

LOZIĆ, E. 2009, Roman stonemasonry workshops in the Ig area. – Arheološki Vestnik 60, 207-221 ROŽIČ, B., L. GALE, R. BRAJKOVIĆ, T. POPIT, P. ŽVAB ROŽIČ 2018, Lower Jurassic succession at the site of potential Roman quarry Staje near Ig (central Slovenia). – Geologija 61/1, 49–71.