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STRATIGRAFSKI I TEKTONSKI POLOZAJ GORNJOKREDNIH KREČNJAKA RUJEVCA (ZAPADNA SRBIJA)

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Ključne reči: dijabazi, krečnjaci, foraminifere, zapadna Srbija

Sindepozicioni gornjokredni vulkanizam u različitim delovima Neotetisa ima poseban značaj za interpretacije i bolje razumevanje tektonskog položaja i evolucije basena u kojem je vulkanizam ispoljen. Vulkaniti asocirani sa sedimentima pružaju mogućnost za studiju povezanosti magmatizma i depozicije, donoseći nove podatke važne za razumevanje geodinamičkih procesa koji kontrolišu sinhroni magmatizam i sedimentaciju i vremena tektonskih događaja. Publikovani podaci upućuju da u okolini Krupnja postoje dijabazi asocirani sa gornjokrednim sedimentima (Karamata, 2006). U tektonskom kontekstu pojave su lokalizovane u uzanoj zoni Zapadne Vardarske ofiolitske jedinice, u graničnom domenu između Jadar-Kopaonik jedinice i Drina-Ivanjica jedinice (Schmid et al., 2020), a prostorno južno od Krupnja, u blizini sela Rujevac.

Motivisani značajem ovakvih izdanaka i nedostatkom detaljnijih informacija o njima, izvedena su terenska i laboratorijska istraživanja odnosa i osobina magmatita i karbonata okoline Rujevca. Novi terenski i laboratorijski podaci upućuju da ne postoji sindepoziciona povezanost bazalta i gornjokrednih krečnjaka. Dijabazi su na kontaktu sa krečnjačkim sočivima, koji su isključivo tektonski, značajno tektonizirani i ne pokazuju osobine peperita. Krečnjaci su podređenog rasprostranjenja i tektonski inkorporirani u bazalte duž reversnih struktura, imaju nepravilnu morfologiju međusobno prostorno odvojenih sočiva različite veličine. Tektonski kontakti bazalta i krečnjaka su sa padom ka sever-severoistoku. Krečnjaci su ubrani u raskinute kose i izokline nabore vergentne ka jug-jugozapadu i sa osama pružanja ZSZ-JJI.

Magmatiti su petrološki dijabazi ofitske do intergranularne strukture, izgrađeni od plagioklasa, monokliničnog piroksena i akcesornih metaličnih minerala. Masivna tekstura ukazuje da odgovaraju plitkim intruzijama (dajkovima). Stene su sveže, bez znakova alteracija, ali jako tektonizirane i ispucale. Brojne pukotine i šupljine u njima naknadno su zapunjene listastim zeolitom, a sporadično se zapažaju i zone drobljenja.

Takođe, sa više profila u okolini Rujevca, uzorkovana su (bio)stratigrafski i mikrofacijalno različita sočiva gornjokrednih krečnjaka i laporovitih krečnjaka. Bioklastični wackestone - mudstone kod škole u Rujevcu, koji sadrže siromašnu asocijaciju marginotrunkana, dikarinela i heterohelicida, su konijak-santonske (?) starosti. Muljeviti skeletni wackestone, takođe sa jednog od izdanaka u blizini škole u Rujevcu, sadrže mikrofaunu donjoturonske starosti. Bioklastični wackestone sa foraminiferama, južno od Rujevca, su konijačko-donjosantonske starosti. Severno od Rujevca, iz bioklastično-intraklastičnog grainstone-a, određene su foraminifere santonske starosti.

Rezultati primenjenih terenskih i laboratorijskih istraživanja upućuju na sledeće: Odnosi dijabaza i gornjokrednih krečnjaka u okolini Rujevca su tektonski. Krečnjaci su deponovani tokom turona, konijaka i santona i naknadno tektonski asocirani sa starijim ofiolitima. Stratigrafski distancirana turonska, konijačka i santonska starost krečnjaka iz prostorno bliskih izdanaka dodatno afirmiše zaključak da dijabazi nisu nastali sinhrono sa gornjokrednim karbonatima.

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STRATIGRAPHIC AND TECTONIC SETTING OF THE UPPER CRETACEOUS LIMESTONES OF RUJEVAC (WESTERN SERBIA)

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Key words: diabase, limestones, foraminifers, western Serbia

The syn-depositional Upper Cretaceous volcanism in different parts of Neotethys is of particular importance for interpretation and better understanding of the tectonic framework and the evolution of the basin in which volcanism took place. Volcanic rocks associated with sediments allow us to introduce the relationship between magmatism and synchronous deposition and offer a new data required for better understanding a geodynamic process controlling these two, along with the time of tectonic events. According to the available published data in the vicinity of Krupanj is recorded diabase associated with the Upper Cretaceous sediments (Karamata, 2006). These rocks are tectonically situated within the narrow zone of the Western Vardar ophiolitic unit, in the bordering area between the Jadar-Kopaonik and the Drina-Ivanjica units (Schmid et al., 2020), whereas spatially are distributed southern from Krupanj, near the village Rujevac.

Due to the importance of these outcrops and insufficient data, field and laboratory studies were conducted in aim to resolve the relationship and the character of igneous and carbonate rocks in the vicinity of Rujevac. The newly obtained data did not signify a syn-depositional connection of basaltic igneous activity with the deposition of the Upper Cretaceous limestones. Diabase is strongly tectonized at their contacts with limestone lenses, which are entirely tectonic, and does not display any peperite signature. Limestones are of less distribution and are tectonically incorporated into basalts along the reverse structures, displaying irregular morphology of mutually separated lenses of variable size. Tectonic contacts between limestones and basalts are dipping to the north-northeast. Limestones are folded into the south-southwest vergent asymmetric and overturned folds with WNW-SSE direction of axis.

In terms of petrology, volcanic rocks consider diabases of ophitic to intergranular texture, composed of plagioclase, clinopyroxene and accessory opaque minerals. Their massive structure considers them shallow intrusions (dykes). Diabase is fresh, unaltered, but intensively tectonized and fractured. Plenty fissures and cavities within were subsequently filled up by lathy zeolite. Zones of underwent crushing are sporadically apparent.

Lens-shaped bodies of the (bio)stratigraphically and regarding microfacies different Upper Cretaceous limestones and marly limestones were sampled at several profiles in Rujevac and its vicinity. Bioclastic wackestone-mudstone, near the school in Rujevac contain poor assemblage of marginotruncanas, dicarinellas and heterohelicids of Coniacian-Santonian (?) age. Skeletal wackestones also from an outcrop near the school in Rujevac contain microfossils of the Lower Turonian age. Bioclastic wackestone with foraminifers southern of Rujevac is of Coniacian-Early Santonian age. The identified foraminifers from bioclastic-intraclastic grainstone, exposed north from Rujevac, suggest Santonian age of these limestones.

Results of the applied field and laboratory investigations points on the following: The Upper Cretaceous limestones and diabase in the vicinity of Rujevac are in tectonic contact. Limestones were deposited during Turonian, Coniacian and Santonian and were tectonically allied within the older ophiolites. Stratigraphically distant Turonian, Coniacian, and Santonian ages of limestones from nearby outcrops additionally support the conclusion of the asynchronous origin of diabase and the Upper Cretaceous carbonate rocks.

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