

Bithynian cherty limestones of the Rosni virovi locality, Budva zone (southern Montenegro)

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Cherty limestones of Triassic age in southern Montenegro were so far considered as Ladinian. However, in Rosni virovi occur grey to purple colored limestone beds with chert concretions together with thin-layered intercalations of shallow-water debris, arenitic beds, and volcanic ash layers. The carbonate-siliciclastic sediments are sandwiched between radiolaritic sequences. Stratified beds in this reduced depositional environment provide an ammonoid fauna of Bithynian age.

The small ammonoid fauna is comprised of five specimens, belonging to five different species: *Acrochordiceras hyatti* Meek, *Schreyerites?* sp., *Gymnites toulai* Arthaber, *Ptychites opulentus* Mojsisovics and *Parapinacoceras* sp. The presence of the species *Acrochordiceras hyatti* Meek restricts the age of the sequence to the Bithynian. The other ammonoid species have extended stratigraphic ranges beyond the Bithynian. Some meter up-section of the ammonite bearing horizon, a conodont fauna confirms further a Late Bithynian age, with *Nicoraella microdus* (Mosher), *Paragondolella bulgarica* (Budurov & Stefanov), and *Neogondolella* ex gr. *regalis* Mosher. Even though the ammonoid fauna is very scarce, it can be best compared with the fauna from Gebze area in Turkey (Fantini Sestini, 1988) and also from Nevada, USA (Monnet and Bucher, 2005), both of Bithynian age.

Open-marine influenced Early-Middle Anisian sedimentary rocks are rarely preserved in the entire Western Tethyan realm. Depositional environments of this time span can be best characterized by restricted shallow-water carbonatic sedimentation. Ammonoid faunas of Bithynian age are unknown from Montenegro until now and are undescribed in the Western Tethys. However, Early-Middle Anisian open-marine influenced sedimentary rocks occur in different mountain ranges in the eastern Mediterranean, often as isolated blocks or pebbles in Middle Jurassic *mélange* complexes with a limited preserved thickness of the reworked sequences. In Montenegro, relatively thick and well-preserved Anisian successions are present but not well studied. In addition, these cherty limestone successions may provide possibilities to close the lack in knowledge about the Early–Middle Anisian open-marine influenced sedimentary history in the Western Tethyan realm prior to the opening of the Neo-Tethys Ocean from Late Anisian times onwards. In combination with occurrences of older open-marine influenced sedimentary rocks, we expect hints for the evolution and position of the Palaeo-Tethys in the eastern Mediterranean.

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REFERENCES

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