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FOSSILS AND MICROFACIES OF BELLEROPHON FORMATION FROM THE VOJSKO PLATEAU

FOSILI I MIKROFACIJES FORMACIJE BELLEROPHON ZARAVNI VOJSKO

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Key words: fossils, microfacies, Late Permian, Bellerophon Formation, Slovenia
Ključne riječi: fosili, mikrofacijes, gornji perm, formacija Bellerophon, Slovenija

Late Permian Bellerophon Formation in Western Slovenia is exposed at the Vojsko plateau. It is ca. 130 m thick sequence composed of dolomites and limestones. The uppermost limestone interval is particularly interesting due to the sponge buildups situated just below the Permian/Triassic boundary. Small sponge biolithites represent a local facies variety within the bioclastic wackestones and packstones.

Generally, three microfacies types appear within these deposits:

Facies A: sponge bafflestone with large chambered demosponges (*Colospongia, Amblysiphonella*), smaller Demospongea and Calcarea. Sponges are preserved in situ but fine skeleton microstructure is partly destroyed by recrystallization (SREMAC et al., 2014).

Facies B: packstone composed of bioclastic material and large biomicrite lithoclasts or coated bioclasts. Bioclasts are irregularly shaped and poorly sorted. Fossil fragments are more diverse than in the Facies C (echinoderms, foraminifers, algae, brachiopods and gastropods). Algal lithoclasts are particularly common. These sediments were probably deposited close to the sponge buildups.

Facies C: packstone/wackestone limestone type composed mainly of echinoderm fragments and foraminifers. Brachiopod shells, bivalves and algal fragments are rarely present. Micritic matrix is often intensively recrystallized and dolomitized. These deposits indicate a lagoonal or shallow marine restricted environment, away from sponge buildups.

Sponge fragments are generally scarce in Facies B and C, which confirms their limited occurrence and quick burial.

The whole sequence was deposited on a shallow inner shelf/ramp in equatorial part of the Western Palaeotethys. Sedimentary basin was partly isolated from the main ocean currents, which enabled the survival of sensitive filter feeders during the stress events at the Guadalupian/Lopingian Boundary and in the Late Permian.

References

SREMAC, J., JURKOVŠEK, B., ALJINOVIĆ, D. & KOLAR-JURKOVŠEK, T. (2014): Upper Permian (Lopingian) sponges of the Vojsko plateau (Slovenia). – 4. Slovenski geološki kongres, Ankaran 8.–10. oktober 2014., Zbornik povzetkov, 66–67.

ODGOVOR BIOTE NA STRESNE DOGAĐAJE U SREDNJEM I GORNJEM PERMU PALEOTETHYSA – PRIMJER VELEBITA

BIOTIC RESPONSE TO ENVIRONMENTAL STRESS IN MIDDLE/LATE PERMIAN OF THE PALAEOTETHYS – VELEBIT EXAMPLE

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Ključne riječi: biotička kriza, srednji/gornji perm, mikrofosili, organski facijes, Velebit
Key words: biotic crisis, Middle/Late Permian, microfossils, organic facies, Velebit Mt.

Stabilno razdoblje ranog i srednjeg perma u Paleotethysu prekinuto je stresnim događajem na granici guadalupij – lopingij (G-L). Biota je imala kratak period za oporavak i prilagodbu novim uvjetima: preživjeli su oportunisti, a specijalizirani organizmi, kao što su velike fuzulinide, su izumrle i nikada se više nisu oporavile. Novi stresni događaj na granici perm – trijas (P-T) doveo je do najvećeg izumiranja u poznatoj povijesti Zemlje.

Stresni događaji na granici G-L i P-T ostavili su zapis u stijenama diljem Paleotethysa, pa tako i na Velebitu (Hrvatska) (SALOPEK, 1942; KOCHANSKY-DEVIDÉ, 1964; SREMAC, 1991; ŠIMIČEVIĆ & SREMAC, 2014).

Detaljno snimljeni stup kroz tamnosive dolomite i vapnence srednjeg i gornjeg perma uz cestu Brušane – Baške Oštarije upućuje na višestruke oscilacije morske razine i povremene biotičke krize. Mali bentos (tzv. krizni taksoni) najbolje je podnio promjene, te su se namnožile glomospire i earlandije, uz nešto globivalvulina i primitivnih miliolida (*Hemigordius* sp.). Među vapnenačkim algama krizu su jako osjetile dasikladalne alge (npr. *Mizzia*), dok su gimnokodijaceje prisutne na istraživanim profilima sve do granice s trijasom.

Na odabranim uzorcima istraživanog profila sa stresnim epizodama napravljena je i laboratorijska analiza organske tvari. Rezultati pokazuju da se radi o termički izmijenjenoj amorfnoj organskoj tvari (mikrinitu) visoke termičke zrelosti. Korelacijom