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Malmske i donjokredne naslage šire okoline Drage (Slovenija)

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Utvrđen je razvoj malmskih i donjokrednih naslaga, u predjelu Borovške gore i šire okoline Drage.

Pomenuto područje istraživano je, prvi put, prilikom izrade geološke karte »Lase—Čabar«, T. K o r m o š (1890). Autor je prikazao, da taj dio terena izgrađuju dolomiti prelazne, donjotrijaske-srednjotrijaske starosti, zatim školjkoviti vapnenci srednjeg trijasa te koraljni vapnenci gornjeg trijasa. Jugozapadni dio tog terena obuhvaćen je istraživanjem, koje je izvršio M. H e r a k i dr. (1961). Autori, dolomite svrstavaju u juru.

Novim rezultatima postignutim regionalnim, geološkim istraživanjima, tokom 1975 god., utvrđeni su kronostratigrafski pa analogno tome i tektonski odnosi na ovom dijelu terena.

Zastupljene su donjomalmske i gornjomalmske naslage, koje će biti prikazane bez kronostratigrafskog razdvajanja.

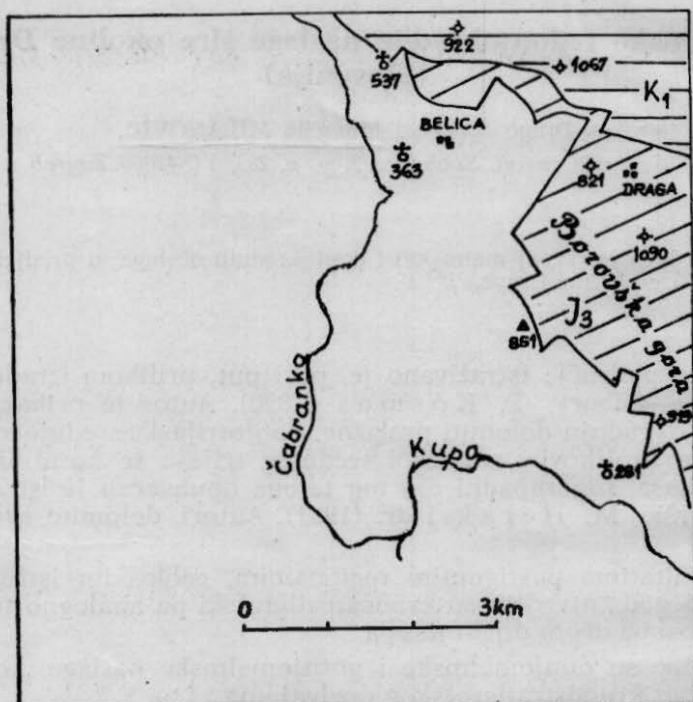
Kontinuirano u superpoziciji slijede naslage donje krede, za razliku od jugozapadnih dijelova Gorskog kotara, gdje donjokredne naslage leže transgresivno preko gornjeg malma.

Malmski slijed naslaga predstavljen je vapnencima i dolomitima u međusobnoj vertikalnoj i laternoj alternaciji.

Vapnenci su sive, svjetlosive i smeđesive boje, guste, sitnoarenitne i srednjearenitne te ponegdje oolitne strukture. Jasno su izražene slojevitosti debljine 20—50 cm., a 15% tog slijeda zauzimaju slojevi debljine 5—20 cm. Od eksternih tekstura konstatirane su ponegdje laporovite prevlake, na lijepo izraženim slojnim ploham. Dolomiti su krupnozrnate, srednjezrnate i ponegdje guste strukture, smeđesive i sive boje, debljine slojeva 5—20 cm. Mjestimice je utvrđena oolitna struktura dolomita karakterizirana parcijalnom dolomitizacijom oolita i potpunom dolomitizacijom cementa.

Iz tih naslaga određena je sledeća asocijacija mikrofosila karakterističnih za malm: *Macroporella sellii* Crescenti, *Griphoporella minima* Nikler & Sokač, *Pfenderina salernitana* Sartoni & Crescenti, *Trocholina elongata* (Leupold), *Clypeina jurassica* Favre i *Parurgonina caelinensis* Cuvillier, Foury & Pignetti-Morano.

Donjokredne naslage predstavljene su vapnencima, a u višem dijelu slijeda vapnencima i dolomitima u vertikalnoj i lateralnoj alternaciji. Vapnenci su sive i smeđesive boje, guste i arenitne strukture, slabije izražene slojevitosti, debljine slojeva 50—100 i više cm. Dolomiti su sive i smeđesive boje, gusti i sitnozrni, debljine slojeva 20—50 cm.



Slika 1: Karta rasprostranjenja maimskih i donjokrednih naslaga.

Figure 1: Map of spreading of Malmian and Lower Cretaceous layers.

Niži dio tog slijeda karakterizira ova zajednica fosila: *Clypeina solkani* Conrad & Radoičić, *Salpingoporella annulata* Carozzi, *Orbitolinopsis copuensis* (De Castro) i *Cuneolina* sp., karakterističnih za neokom. Iz nešto višeg dijela tog slijeda naslaga određena je *Cuneolina laurenti* Sartoni & Crescenti, *Cuneolina* sp., *Sabaudia* sp., *Haplophragmoides* sp., *Textulariidae* i *Miliolide*, raspona barem—donji alb.

Dolomiti, u potpunom slijedu naslaga, isključivo su postdepozicionog postanka.

LITERATURA

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Malmian and lower cretaceous sediments in the broader surroundings of Drage (Slovenia, Yugoslavia)

Drago Savić and Momčilo Milanović

For the first time the development of Malmian and Lower Cretaceous layers was established in the area of Borovška Gora and the wider surroundings of Draga.

The above mentioned area was for the first time explored during the course of work on the geologic map »Lase-Cabar« by T. Kormoš (1890).

The author has described this part of the field as being made up of dolomites of transitive Lower — Middle Triassic age, then limestones of Middle Triassic and anthozoan limestones of Upper Triassic.

The southwestern part of this area has been explored by M. Herak & al. (1961). The authors place the dolomites in Jurassic.

By new results obtained during regional geologic research in 1975 year, chronostratigraphic and also tectonic relations in this area have been determined.

In the exposed sedimentary succession, Lower and Upper Malmian layers, which will be described without chronostratigraphic separation are represented.

In this series, Lower Cretaceous layers follow continuously, as distinguished from the southwestern part of Gorski Kotar, where Lower Cretaceous sediments lay unconformably over the Upper Malmian.

Malmian succession of layers is represented by limestones and dolomites in mutual vertical and lateral alternation.

The Limestones are grey, light grey and brownish grey in colour, dense, fine-grained arenitic and middle-grained arenitic, in some places oolitic in structure. Bedding planes are clearly marked, the thickness of beds is 20 to 50 cm, 15% of beds in this succession are 5—20 cm thick. Among external structures in some places were observed marly covers on well marked bedding planes.

Dolomites are of a coarse-grained, middle-grained and somewhere dense structure, brownish grey and grey in colour, the thickness of beds is 5—20 cm. In some places the oolitic structure in dolomites, characteristic by partial dolomitization of oolites and total dolomitization of cement was ascertained. In these layers we determined the following association of microfossils, significant for the Malmian: *Macroporella sellii* Cresenti, *Griphoporella minima* Nikler & Sokač, *Pfenderina salernitana* Sartoni & Cresenti, *Trocholina elongata* (Leupold), *Clypeina jurassica* Favre and *Parurgonina caelinensis* Cuvillier, Foury & Pignatti-Morano.

Lower Cretaceous beds are represented by limestones, and in the upper part of succession by limestones and dolomites in vertical and lateral alternation.

Limestones are grey and brownish grey of colour, dense and arenitic of structure, less pronounced bedding, thickness of beds 50 to 100 and more cm.

Dolomites are grey and brownish-grey, dense and fine-grained, thickness of beds is 20 to 50 cm.

The lower part of this succession is characterised by the association of fossils: *Clypeina? solkani* Conrad & Radoičić, *Salpingoporella annulata* Carozzi, *Orbitolinopsis capuensis* (De Castro), *Cuneolina* sp., significant for Neocomian.

In slightly higher part of this succession of layers the following were determined: *Cuneolina laurenti* Sartoni & Cresenti, *Cuneolina* sp., *Sabaudia* sp., *Haplophragmoides* sp. *Textulariidae* and *Miliolidae*, of Barrême — Lower Alb span.

It is necessary to mention that the dolomites, in complete succession of layers, are exclusively of postdepositional origin.