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NEOGENE OF THE PARATETHYAN REGION  
9th INTERNATIONAL WORKSHOP ON  
THE NEOGENE FROM THE CENTRAL AND SOUTH-EASTERN EUROPE  
RCMNS Interim Colloquium  
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## NEW SCALLOP (BIVALVIA: PECTINIDA) FINDINGS IN THE MIDDLE MIOCENE DEPOSITS OF NORTHERN CROATIA

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Bivalves of the genus *Gigantopecten* Rovereto, 1899 (Bivalvia: Pectinida) are common in the Middle Miocene (Badenian) deposits of the Central Paratethys (e.g., Schultz, 2001; Mandić, 2004; Studencka, 2019 and references therein).

Large-sized species *Gigantopecten* (originally: *Pecten*) *nodosiformis* (Pusch, 1837) is particularly well researched, as it can be clearly recognized in the sediment, due to its large shells with nodes on top of radial ribs. It is recorded in the Miocene deposits of the Atlantic and Mediterranean provinces at least since the Early Miocene (e.g., Studencka, 2019 and references therein), and it is widespread in the Middle Miocene (Badenian) deposits of the Central Paratethys (e.g., Studencka, 2019 and references therein; Mandić, 2004). At the last (8th) NCSEE Workshop, this scallop was chosen for the workshop logo (Studencka, 2019). These facultatively mobile scallops are also recorded from several Middle Miocene localities in Northern Croatia, e.g., on the Medvednica Mt., Zrinska Gora Mt., Ivanščica Mt., Moslavačka Gora Mt. and Psunj Mt., and part of these specimens are today housed in the Croatian Natural History Museum (CNHM) in Zagreb.

Findings of *G. nodosiformis* in the Badenian deposits of Northern Croatia are so far best described in detail in Kochansky (1944), where the author recorded more than 20 specimens at several localities on the Medvednica Mt., near Zagreb. These specimens are also stored in the CNHM.

During the 2020 we conducted the field work with the biology student E. Gujić in the area of Klenovnik, Hrvatsko Zagorje, searching for the possible topic of his master thesis. From the two outcrops of the Miocene sedimentary rocks, we collected several new specimens of this species. Pectinid shells were collected from the biocalcarenes with coralline algae. We plan to conduct a further research, which will give more insight into the paleoecology and paleogeography of this area in the Northern Croatia.

Klenovnik Miocene calcarenites were deposited during the beginning of the Middle Miocene (Badenian) at the southwestern margin of the Central Paratethys. These findings will be very helpful in the correlation with the neighbouring Badenian localities and research on possible migration corridors during the Badenian in the Central Paratethys. As described in Studencka (2019 and references therein), the oldest occurrences of this species in the Paratethys area are recorded from the Karpatian deposits of southwestern Moravia, Austria and Hungary. In Austria it was also found in the earliest Badenian (Mandić, 2004). *G. nodosiformis* occurs in Polish and Ukrainian part of the Carpathian Foredeep Basin in the Lower Badenian deposits, with no records from the Upper Badenian deposits, while in Austria and Slovakia this species is recorded also in the Upper Badenian. Findings in Romania range from the Lower to the Upper Badenian. Mikuž (2009) lists the previous findings of these large scallops in Slovenia and describes a rare finding of a complete specimen of *G. nodosiformis* with both valves from Dobruška Vas in Dolenjska, associated with the Middle Miocene (Badenian) "Lithothamnion limestones". The comparison among the localities in the vicinity of the area of the assumed "Trans-Tethyan" corridor gives a further insight into the possible open marine corridors and migration routes during the Badenian, similar to those proposed by Kováč et al. (2017).

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## POSTER PRESENTATION