Trace Fossils in the Maastrichtian Sediments of the Eastern Flysch Basin of the Great Caucasus Marginal Sea

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Maastrichtian sediments are developed within northern part of the Zhinvali-Gombori structural-morfological unit of the Southern Slope zone of the Great Caucasus fold-and-thrust belt and are represented by Sabue suite. According to Ar. Tsagareli (1954), N. Mrevlishvili (1997) and the authors' personal observations data in the study area Sabue suite is built up by limestones, sandy limestones, calcareous sandstones, micro-conglomerates and breccias(thickness 25-200 m). Maastrichtian sediments, due to their composition and provenance of the material have all typical to flysch features and accordingly form together with lower- and upper Cretaceous sediments entire calcareous-clastic flysch formation within the eastern part of the Great Caucasus backarc basin (Eastern (Chiauri-Dibrar) Flysch Basin).

Within Maastrichtian sediments trace fossils have been detected in the cross-sections of the rivers Aragvi (vil. Tsikhisdziri and Pavleuri) and Khevgrdzeli (vil. Sabue)gorges.

Defined ichnocomplex in the r. Aragvi cross-sections: Chondrites intricatus (Brongniart), Ch.targionii (Brongniart), Halopoa imbricata Torell, Nereites irregularis (Schafhäutl), Nereitesisp., Ophiomorpha annulata (Książkiewicz), Oph. rudis (Książkiewicz), Phycosiphon incertum Fischer-Ooster, Planolites isp, Scolicia strozzii (Savi & Meneghini), Trichichnuslinearis Frey, Zoophycos isp. – is typical of the Nereites subichnofacies of the deep sea Nereites ichnofacies, in distal parts of turbiditic depositional systems.

Defined ichnocomplex in Maastrichtian sediments of the r. Khevgrdzeli cross-sections: Alcyonidiopsis isp., Chondrites intricatus (Brongniart), Ch.targionii (Brongniart), Ch. stellata(Brongniart), Halimedides isp., Ophiomorpha annulata (Książkiewicz), Oph. rudis (Książkiewicz),Paleodictyon strozzii Meneghini in Savi & Meneghini, Planolites isp,?"Rhizocorallium" hamatum (Fisher-Ooster), Trichichnus linearis Frey, Tubulichnium rectum (Fischer-Ooster, 1858)- refers to the Paleodictyon subichnofacies of the deep sea Nereites ichnofacies, in distal parts of turbiditic depositional systems.

According to Santonian-Maastrichtian facies distribution and paleogeographic map (Tsagareli A.,1954, fig.33) during the Late Senonian northern part of the Zhinvali-Gombori structural-morfological unit represented a deep marine depositional environment with accumulation of turbidites. The preliminary results of our paleoichnological studies completely match with this assumption.