Scarce population of malacofauna from MIS8/L3, at Titel loess plateau, Serbia

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We present our preliminary findings from the survey of malacofauna of the Titel loess plateau – Mošorin site (Serbia), conducted during 2018/2019. Titel loess plateau is situated near the confluence of Tisa and Danube rivers, in the southern central part of the Vojvodina province, the region known for having valuable continental climate record for the past million years. The study aims to gather palaeoenvironmental data and discern patterns of environmental changes during the Pleistocene in the loess domain. Previous surveys were done at the loess sites in Batajnica, Zemun, Crvenka and Irig. The exposed part of the Mošorin loess-paleosol section is 30 m high and covers the last three glacial periods. It is the first time we carried out a malacological analysis on the L3 segment of the profile. A total of 26 samples were collected from 5.2 m long cleaned profile section (ending of S3 to the beginning of S2). Nine species of snails were present in this horizon, including Chondrula tridens, Granaria frumentum, Helicopsis striata, Pupilla muscorum, Punctum pygmaeum, Succinella oblonga, Vallonia costata, Vitrina pellucida, and certain as-yet-unidentified slug taxa (Limacidae, Agriolimacidae, Milacidae).

Greatest diversity and abundance was found near the S3 paleosol. Samples with no snail shells are continuous, and they are situated in the middle and upper part of the studied profile section. The first three samples that are closest to S3 include 65% of all snails shells found in the profile. The number of snail taxa and their abundance gradually increases again toward the S2 paleosol. Based on ecological preferences of discovered species (mostly thermophilous and xerophilous) we deduced that the environment during the L3 time period was an opened grassland, while the climate was mild and mostly dry.
