Séminaire International de Paléontologie, Évolution, Paléoécosystèmes et Paléoprimatologie
Salle 410, bât. B35 (3ème étage, aile nord)

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Preliminary results in study of fossil microvertebrates from the Upper Miocene deposits of the Eastern Carpathian Foreland, Romania

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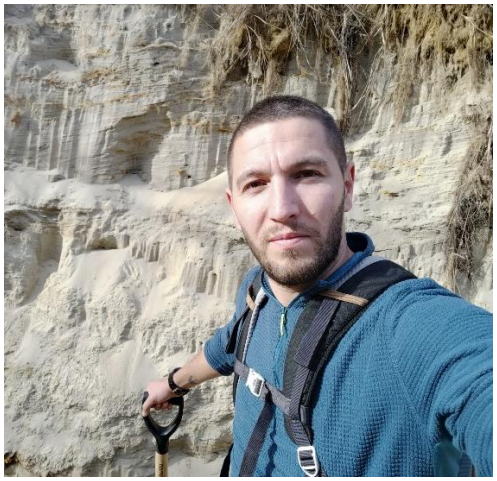

The sedimentary deposits from the Upper Miocene in the northeastern part of Romania have been studied over time by specialists in geology and paleontology from this country. The current study aims to identify fossil remains belonging to continental animals, which evolved from the end of the Bessarabian to the Maeotian (MN 9 to MN 12). After an impressive work of prospecting, over fifteen fossiliferous points were identified that also contain fossil elements of microvertebrates. From the multitude of fossil remains that were collected from the sedimentary deposits such as postcranial bones of fishes, reptiles, or even dental fragments, or eggshells, in the present study only the dentition elements of microvertebrates were described in detail. Micromammals from the orders Rodentia, Lagomorpha and Eulipotyphla were the basis for the correlations of the Upper Miocene deposits in this area with deposits of the same age in eastern Europe. The descriptions of dental morphologies and comparisons with representatives of these orders were elements that formed the basis for the identification of fossil species of micromammals. The interpretation of faunal associations is useful for a better understanding of the paleoenvironment existing during the Sarmatian (sensu lato) and Maeotian. The preliminary data of this study show an impressive fossiliferous potential of the Upper Miocene deposits from the eastern part of the Eastern Carpathians to the border with the Republic of Moldova and represent a novelty for the paleontology of this area and which completes the list of fossil associations that have been identified so far in such sediments. Depending on the faunal associations of micromammals, the stratigraphy of the analyzed deposits is interpreted, thus presenting a biostratigraphic scale for this region of the East European Platform.