

## Oligocene–Miocene freshwater gastropods from the Oltu-Narman Basin in eastern Turkey

Mathias Harzhauser, Thomas A. Neubauer, and İzzet Hoşgör


*Acta Palaeontologica Polonica* 63 (2), 2018: 357–369 doi:<https://doi.org/10.4202/app.00469.2018>

We describe the first record of a late Oligocene or early Miocene freshwater gastropod fauna from the Susuz Formation of the Oltu-Narman Basin in northeastern Anatolia. The assemblage consists of only six species, indicating the presence of a well-oxygenated lake, pond or anabranch rich in vegetation. Only two of the taxa are related to European Oligo-Miocene species. The fauna might be the first indication of a yet undocumented Eastern Anatolian freshwater biogeographic region, characterized by high endemism and minor influence from the coeval Peri-Paratethyan and Aegean–Anatolian regions in the west. The biostratigraphic value of the assemblage is low but might rather point to a Miocene age of the upper part of the Susuz Formation. *Theodoxus susuzianus*, *Bithynia erzurumensis*, and *Valvata koehleri* are described as new species.

**Key words:** Mollusca, Gastropoda, Oligocene, Miocene, Turkey, Anatolia.

Mathias Harzhauser [[mathias.harzhauser@nhm-wien.ac.at](mailto:mathias.harzhauser@nhm-wien.ac.at)], Geological-Palaeontological Department, Natural History Museum Vienna, Burgring 7, 1010 Vienna, Austria. Thomas A. Neubauer [[thomas.a.neubauer@allzool.bio.uni-giessen.de](mailto:thomas.a.neubauer@allzool.bio.uni-giessen.de)], Department of Animal Ecology & Systematics, Justus Liebig University, Heinrich-Buff-Ring 26-32 IFZ, 35392 Giessen, Germany, and Naturalis Biodiversity Center, PO Box 9517, 2300 RA Leiden, The Netherlands. İzzet Hoşgör [[izzet.hosgor@calikenerji.com](mailto:izzet.hosgor@calikenerji.com)], Çalık Enerji, Oil and Gas Directorate, 06520, Söğütözü-Ankara, Turkey.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see [creativecommons.org](https://creativecommons.org)), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(1,082.0 kB\)](#)