



DESCRIPTION OF A NEW SPECIES OF *KOVALEVSKIELLA* (OSTRACODA,
LIMNOCYTHERIDAE, TIMIRIASEVIINAE) FROM GROUNDWATER OF
THE DANUBE RIVER IN AUSTRIA

BY

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ABSTRACT

The species name *Kovalevskiella elisabethae* n. sp. is proposed for a new taxon of a Recent ostracod found in interstitial sediments of the alluvial plain of the Danube in the surroundings of Vienna, Austria. The main characters that differentiate *Kovalevskiella elisabethae* n. sp. from its congeners *K. bulgarica*, *K. cvetkovi*, *K. dani*, *K. rudjakovi* and *K. phreaticola* are based on the morphology and chaetotaxy of antennula, antenna and mandible. Important diagnostic characters of the new species are the 5-segmented antennula, the presence of 2 setae on the posterior margin of its fourth segment, the presence of only 1 seta (besides the conjoined seta and aesthetasc) on its last segment, as well as the presence of 1 seta on the basis and 3 on the endopodite of the mandibula. An identification key for the Recent species of the genus is provided.

Key words. — Systematics, Palaearctic region, groundwater, meiofauna

ZUSAMMENFASSUNG

Kovalevskiella elisabethae n. sp. wird als neue Art eines rezenten Ostracoden aus interstitialen Sedimenten der Donauebene in der Umgebung von Wien, Österreich vorgeschlagen. Details in der Morphologie und Ornamentierung der Antennula, Antenna und Mandibel unterscheiden *Kovalevskiella elisabethae* n. sp. von den Arten *K. bulgarica*, *K. cvetkovi*, *K. dani*, *K. rudjakovi* und *K. phreaticola*. Die 5-gliedrige Antennula und das Vorkommen von 2 Borsten auf dem hinteren Rand ihres vierten Gliedes, das Vorhandensein einer einzigen freien Borste (neben der mit dem Aesthetasken verwachsenen Borste) an ihrem letzten Segment, sowie die Borstenzahl (3) der Endopoditen und des ersten Gliedes des Exopoditen (1) der Mandibel, gehören zu den wichtigsten diagnostischen Merkmalen der neuen Art. Ein Bestimmungsschlüssel der rezenten Arten der Gattung wird erstellt.

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INTRODUCTION

The inventory of ostracods of Austria reveals a total number of 91 described Recent species (Gaviria, 2017). One additional species belonging to the genus *Kovalevskiella* Klein, 1963 was reported by Danielopol (1976a, b, 1983, 1984, 1991), Carbonel et al. (1986), Danielopol & Baltanás (1996), Danielopol & Pospisil (2001), Danielopol et al. (2018), and listed by Pospisil (1994) and Griebler & Mösslacher (2003) in ecological studies. These authors found it in the interstitial waters of the Danube valley in the surroundings of Vienna and Lower Austria, but it remained until today under open nomenclature (Meisch, 2000).

The genus *Kovalevskiella* includes five Recent species (Karanovic, 2012), namely *K. bulgarica* (Danielopol, 1970) from Bulgaria and Greece, *K. cvetkovi* (Danielopol, 1969) from Bulgaria, *K. dani* Karanovic, 2003 from Greece, *K. phreaticola* (Danielopol, 1965) from Romania and *K. rudjakovi* (Danielopol, 1969) from Greece, Romania and the Russian Federation (Karanovic, 2012).

Four additional species — *K. turianensis* Klein, 1963 (type species of the genus), *K. caudata* (Lutz, 1965), *K. prima* (Carbonel & Ritzkowsky, 1969) and *K. euboeaensis* Mostafawi, 1994 — are fossils. Karanovic (2003) proposed to transfer *K. caudata* to the genus *Frambocythere* Colin, 1980 (in Colin & Danielopol, 1980) due to the presence of 2 sulci on the carapace, shown at one of the figures in the description of the species (Lutz, 1965). However, all valves of *K. caudata* from Aquitaine examined by Carbonel et al. (1986) and Carbonel et al. (1987) show only one sulcus. Thus, *K. caudata* should be also considered belonging to the genus *Kovalevskiella*. The genus *Cordocythere* Danielopol, 1965 is considered a synonym of *Kovalevskiella* Klein, 1963.

During several sampling activities related to groundwater studies in the surroundings of Vienna, we found again specimens of an undescribed species of the genus *Kovalevskiella*. The study of its taxonomical characters confirmed morphological differences with the known species of the genus. The object of this article is to describe and illustrate the new species based on the characters of the soft structures and of the valves. Some chemical parameters of the locus typicus of the new species are presented.

MATERIAL AND METHODS

Samples containing ostracods were collected from interstitial habitats of the Lobau region near Vienna, formed by alluvial sediments of the Danube river (Danielopol et al., 1994; Pospisil, 1994) and in groundwaters of Kritzendorf (north of Vienna), near the Danube river. Details of the sampling localities are given in fig. 1: (1) well D10 located at the National Park Donauauen, Lobau region, near