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Crangonyx islandicus sp. nov., a subterranean freshwater amphipod (Crustacea, Amphipoda, Crangonyctidae) from springs in lava fields in Iceland

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Abstract

Crangonyx islandicus **sp. nov.** (Crustacea, Amphipoda, Crangonyctidae) is described from Iceland. This is the second species of freshwater, subterranean, gammaridean amphipods found in Iceland and the first species of the family Crangonyctidae. *Crangonyx islandicus* **sp. nov.** can be distinguished from other species of the genus *Crangonyx* by combination of the following characters: the number of spines on the outer and inner lobes of the maxillipedal palp, the presence of a spine at the base of the unguis of the dactylus of gnathopods 1 and 2, stout and short uropod 3, and by a short and wide telson. The species was recorded in South, Southwest, West and Northeast Iceland from numerous springs emerging from relatively young (<10 000 years), porous lavas. The species has apparently survived Pliocene and Pleistocene glaciations in groundwater of porous lava fields and may have persisted in Iceland for several million years.

Key words: Amphipoda, *Crangonyx*, Crangonyctidae, Crangonyctoidea, Iceland, glaciations, subterranean, groundwater, subarctic

Introduction

Subterranean waters hold a variety of organisms of most animal phyla (see Botosaneanu 1986). Amphipods (Crustacea) are among the animals that characterise subterranean habitats world-wide, with more than 1000 amphipod species described from subterranean waters (Sket 1999). Due to the diversity of amphipods in subterranean waters and their long presence there, subterranean amphipods are excellent tools for evaluation of biogeographical patterns (Holsinger 1977, 1986, 1993).

Subterranean amphipods are rare at higher latitudes and only a few species have been

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