



## ***Gammarus kesianensis* sp. nov., a new blind amphipod species from Turkey (Amphipoda, Gammaridae), with a key to eyeless *Gammarus* species of Europe**

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### **Abstract**

A new blind species of freshwater amphipod, *Gammarus kesianensis* sp. nov., collected from Erikli Fountain, Keşan, Turkey, is described and illustrated. The new species belongs to *Gammarus pulex*- group and is the fourth blind species of the group reported from Europe and Turkey. A detailed morphological description and illustrations of the new species are given and differences from related species are discussed. In addition, a key to the blind/eyeless species of *Gammarus* genus of Europe is presented.

**Key words:** Freshwater, blind amphipod, *Gammarus*, new species, Turkey

### **Introduction**

Freshwater *Gammarus* species inhabit both superficial and subterranean waters. As in other groups of the genus, populations within the *Gammarus pulex*- group may be eyeless or partially so, usually because of life in subterranean waters (Karaman and Pinkster, 1977a).

Up until now only two taxa have been reported as blind representatives of the *Gammarus pulex*- group in Europe. Among them, *Gammarus vignai* Pinkster & Karaman, 1977 was reported as the blind species in the *Gammarus pulex*- group (Karaman and Pinkster 1977a, b; 1987). The remaining one, *Gammarus pulex polonensis*, was reported from Poland by Karaman and Pinkster (1977a). Recently, new blind amphipod species of *Gammarus* were reported from China. Hou and Li (2003) described a new blind species of amphipod belonging to the *pulex*- group, *Gammarus aoculus*, from China. Later, Hou *et al.* (2004) reported another eyeless species, *Gammarus translucidus*, in the *pulex*- group from Zuanyankong Cave in the north of Guizhou, China, and Hou *et al.* (2005) also reported another eyeless species, *Gammarus comosus*, from Dongwandong Cave, China. The last blind species belonging to the *pulex*- group, *Gammarus abstrusus*, was reported in 2006 by Hou *et al.* from Longmendong Cave in the southwestern part of Sichuan Province, China.

*G. albimanus* Karaman 1968 and *G. sketi* Karaman 1989, other blind species in the genus, belong to the *balcanicus*- group and were reported from a cave in Macedonia and from a spring on NE coast of Ohrid Lake, respectively (Karaman 1968, 1989). Hou and Li (2002) reported two new blind *Gammarus* species, *G. xianfengensis* and *G. lichuanensis*, belonging to the *balcanicus*- group from China. Later, Özbek and Güloğlu (2005), described another blind species of freshwater amphipod, *Gammarus ustaoglu*, belonging to the *balcanicus*- group from Anamur, Turkey. In the present study we describe a new blind amphipod species, *Gammarus kesianensis* sp. n., belonging to the *pulex*- group from the Thrace region of Turkey in southeastern Europe.