

ЗАМЕТКИ

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**SECOND RECORDS OF THE ENDANGERED SPECIES *ARTEMIA URMIANA*  
(ANOSTRACA) IN THE CRIMEA HABITAT**

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*Artemia* (Anostraca) is one of the most primitive and ancient group of crustaceans. Representatives of this genus are the most halotolerant animals living in hypersaline lakes of all continents except Antarctica. They play a key role in the ecosystems of these water bodies, and often are the only animals that inhabit these extreme habitats. They play an essential role in the development of modern aquaculture because *Artemia nauplii*, emerging from cysts, are main live feed for the larvae of cultured fishes and shrimps. Currently *Artemia* are also widely used in toxicology and pharmacology to assess the effects of various toxicants and for screening biologically active compounds. In total, 7 species of bisexual *Artemia* and many parthenogenetic populations of different ploidy exist in the world. In Crimea there are more than 29 water bodies inhabited by bisexual and parthenogenetic populations of these crustaceans [Shadrin et al., 2012]. *Artemia urmiana* Günther, 1899 is a parent species of all bisexual and parthenogenetic *Artemia* diversity in Eurasia [Maccari et al., 2013; Eimanifar et al., 2015]. For a long time this species was considered endemic to Lake Urmia in Iran. In 2005, the species was first found in hypersaline Lake Koyashskoe on the Kerch Peninsula in East Crimea [Shadrin et al., 2008; Abatzopoulos et al., 2009]. In 2015, it was listed in the Red Book of the Republic of Crimea [Anufrieva, Shadrin, 2015]. In May — June 2016, massive numbers of

cysts, nauplii, adult males and females of *A. urmiana* was recorded in the hypersaline Lake of marine origin Sasyk-Siwash (45°11'26"N, 33°30'24"E, the lake area of 75 km<sup>2</sup>, depth up to 1.2 m). The distinctive morphological characters and the high proportion of males leave no doubt that bisexual individuals belong to the species *A. urmiana*. Salinity in the lake during sampling fluctuated from 250 to 280 psu, the temperature from 25 to 31 °C, and pH from 7.4 to 7.7. Lake Urmia has been the main habitat of *A. urmiana* for a long time, but the lake is now quickly drying. Its water surface area has decreased by almost 90 %, the salinity drastically increased, the reproduction of *Artemia* in the reservoir is practically stopped, and potential of the extinction of the species in the Lake is discussed by scientists [Asem et al., 2012; Hamzekhani et al., 2016]. The future of *A. urmiana* on our planet may largely depend on the conservation of its populations in Crimea. Therefore, our finding of a large population of the species in the largest Crimean hypersaline Lake Sasyk-Siwash is of particular interest. Currently, Lake Sasyk-Siwash has received the status of Nature Reserve, a fact which gives much hope for survival of the endangered species *A. urmiana*.

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**Находка второго в Крыму местообитания краснокнижного вида *Artemia urmiana* Günther, 1899 (Anostraca). *E. V. Anufrieva*<sup>1</sup>, *Ф. Д. Ама*<sup>2</sup>, *Н. В. Шадрин*<sup>1</sup>. <sup>1</sup>Институт морских биологических исследований имени А. О. Ковалевского РАН, Севастополь, Россия, <sup>2</sup>Институт аквакультуры Торре-де-ла-Саль, Рибера де Кабанес (Кастельон), Испания. Вид *Artemia urmiana* Günther, 1899 долгое время считался эндемиком озера Урмия в Иране. В 2005 г. он был найден в гиперсолёном озере Кояшское на Керченском полуострове. В 2015 г. был занесён в Красную книгу Республики Крым. В мае — июне 2016 г. отмечено массовое присутствие цист, науплиусов, взрослых особей самок и самцов этого вида в гиперсолёном озере морского происхождения Сасык-Сиваш.**  
**Ключевые слова:** *Artemia urmiana*, редкие виды, гиперсолёное озеро, Крым