



## Appearance of new alien ctenophore *Beroe ovata* in Caspian Sea could bring about ecosystem recovery

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### Abstract

A new alien ctenophore species, *Beroe ovata*, was recorded for the first time in the southern Caspian Sea in 2019. The Caspian Sea was invaded with non-native species such as lobate ctenophore *Mnemiopsis leidyi* in the late 1990's. The arrival of *B. ovata*, a non-native ctenophore predator for the Caspian Sea, has been much anticipated since the arrival of its prey, another ctenophore *Mnemiopsis leidyi*. The adverse impact of *M. leidyi* has been devastating since its appearance on the Caspian Sea, causing unprecedented decreases in mesozooplankton biodiversity and biomass, resulting in a collapse of fisheries on small pelagics. The occurrence of *B. ovata* in the Caspian Sea is of great interest to scientists, environmental managers and other stakeholders such as fishermen since this new invader had already shown to help the recovery of the fishery and ecosystem in the Black Sea. Based on the outcomes of intense field and laboratory investigations from these two neighbouring seas, we could suggest that the arrival of *B. ovata* will result in also the recovery of the Caspian Sea ecosystem.

**Keywords:** Ctenophore, *Beroe ovata*, *Mnemiopsis leidyi*, Non-native species, Caspian Sea.