

Notice me! Neglected for over a century, Black Sea spider crab re-described

September 1 2020



Macropodia czernjawska in the wild, Bugazskaya kosa (near Anapa), Caucasus, Black Sea. Credit: Sergey Anosov

Even though recognised in the Mediterranean Sea, the *Macropodia*

czernjawsii spider crab was ignored by scientists (even by its namesake Vladimir Czernyavsky) in the regional faunal accounts of the Black Sea for more than a century. At the same time, although other species of the genus have been listed as Black Sea fauna, those listings are mostly wrong and occurred either due to historical circumstances or misidentifications.

Now, scientists re-describe this, most likely, only [species](#) of the genus occurring in the Black Sea in the open-access journal *Zoosystematics and Evolution*.

The spider crab genus *Macropodia* was discovered in 1814 and currently includes 18 species, mostly occurring in the Atlantic and the Mediterranean. The marine fauna of the Black Sea is predominantly of Mediterranean origin and *Macropodia czernjawsii* was firstly discovered in the Black Sea in 1880, but afterwards, its presence there was largely ignored by the scientists.

After the revision of available type specimens from all available collections in the Russian museums and the Senckenberg Museum in Frankfurt-on-Main, as well as newly collected material in the Black Sea and the North-East Atlantic, a research team of scientists, led by Dr. Vassily Spiridonov from Shirshov Institute of Oceanology of Russian Academy of Sciences, re-described *Macropodia czernjawsii* and provided the new data on its records and updated its ecological characteristics.

"The analysis of the molecular genetic barcode (COI) of the available material of *Macropodia* species indicated that *M. czernjawsii* is a very [distinct species](#) while *M. parva* should be synonymised with *M. rostrata*, and *M. longipes* is a synonym of *M. tenuirostris*", states Dr. Spiridonov sharing the details of the genus analysis.



Macropodia czernjawszkii in wild, Tuaphat (near Gelendzhik), Caucasus, Black Sea. Credit: Sergey Anosov

All *Macropodia* species have epibiosis and *M. czernjawszkii* is no exception: almost all examined crabs in 2008-2018 collections had significant epibiosis. It normally consists of algae and cyanobacteria and, particularly, a non-[indigenous species](#) of red alga *Bonnemaisonia hamifera*, officially reported in 2015 at the Caucasian coast of the Black Sea, was found in the epibiosis of *M. czernjawszkii* four years earlier.

"It improves our understanding of its invasion history. Museum and

monitoring collections of species with abundant epibiosis (in particular inachid crabs) can be used as an additional tool to record and monitor introduction and establishments of sessile non-indigenous species," suggests Dr. Spiridonov.

More information: Bee Yan Lee et al, Revision of the deep-water spider crab genus, *Scyramathia* A. Milne-Edwards, 1880, with the description of a new species from the Mediterranean and notes on *Rochinia* A. Milne-Edwards, 1875, and *Anamathia* Smith, 1885 (Crustacea, Decapoda, Brachyura, Epialtidae), *Zoosystematics and Evolution* (2020). [DOI: 10.3897/zse.96.48041](https://doi.org/10.3897/zse.96.48041)

Provided by Pensoft Publishers

Citation: Notice me! Neglected for over a century, Black Sea spider crab re-described (2020, September 1) retrieved 3 May 2024 from <https://phys.org/news/2020-09-neglected-century-black-sea-spider.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--