

## Scientific note

# First record of the snapping shrimp, *Automate branchialis* Holthuis & Gottlieb, 1958 for Croatian waters (Decapoda, Alpheidae)

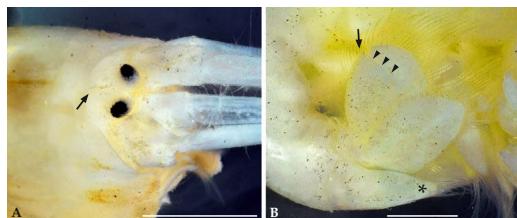
Feliza Ceseña\*, Hannes Geiselbrecht\*, Martin Heß\*\*, Sebastian Landmann\*,  
Tobias Lehmann\*, \*\*, Borut Mavric\*\*\*, Roland R. Melzer\*, \*\*, Roland Meyer\*,  
Martin Pfannkuchen\*\*\*\* & Moira Bursic\*\*\*\*\*

The impact of substantially detrimental anthropogenic activities such as eutrophication, sewage discharge, inorganic pollution, etc., has put the future of Mediterranean biodiversity at stake. This calls for a dramatic increase in conservation efforts. Brijuni National Park is one of the few marine protected areas (MPAs) in the Northern Adriatic, i. e. one of the most polluted parts of the Mediterranean. Bio-inventories are needed to assess the conservation outcome of this small, but historic MPA. In our first survey of the area using minimally invasive data acquisition methods, we found indications of high decapod species richness (Melzer et al. 2016). A more recent second field campaign has increased the number of recorded decapods on circa 90 species, including several rare ones.

Among these finds, a specimen of *A. branchialis* deserves particular attention. It was found at 44.9228°N, 13.7361°E south of Cape Vrbanj under a stone in the upper infralittoral in an area with a mix of rock ledges and sediment spots. Some of the diagnostic features are depicted in Figure 1.

*A. branchialis* had previously been recorded for only eight localities (Katağan & Kocataş 2001) with a single Adriatic record from the Gulf of Manfredonia off the coast of Italy, circa 400 km south of Brijuni (Froglio 1975, 2010). These records transformed *A. branchialis* from a putative Lessepsian migrant (Holthuis & Gottlieb 1958) into an autochthonous Mediterranean species. As can be concluded from the previous records, our sample of *A. branchialis* from Brijuni MPA represents the first record for both, Croatian waters and the Northern Adriatic.

**Acknowledgements.** Our inventory of Brijuni MPA was conducted with permission of the Croatian Ministry of Environment and Energy in Zagreb. Special thanks go to the park rangers for taking us to some very close to pristine underwater spots.



**Fig. 1.** *Automate branchialis* from Brijuni MPA, extended depth of field photos (ZSMA20160784). A. Dorsal view of anterior body section with deeply concave carapace margin and short, pointy rostrum (arrow). B. Dorsal view of hind section of the body; asterisk, telson with specific armature; arrowheads, diaeresis on uropod's exopod; arrow, tooth and spine on outer margin. Scale bars = 1 mm.

## References

- Froglio, C. 1975. The occurrence of *Automate branchialis* Holthuis & Gottlieb (Decapoda, Alpheidae) in the Adriatic Sea. Crustaceana 29: 308–309.
- . 2010. Crustacea, Malacostraca, Decapoda. Biologia Marina Mediterranea 17 (Suppl 1): 519–534.
- Holthuis, L. B. & Gottlieb, E. 1958. An annotated list of the decapod Crustacea of the Mediterranean coast of Israel, with an appendix listing the Decapoda of the eastern Mediterranean. Bulletin of the Research Council of Israel, Sect. B, 7(1–2): 1–126.
- Katağan, T. & Kocataş, A. 2001. New localities for *Automate branchialis* Holthuis & Gottlieb, 1958 (Decapoda, Alpheidae) in the Mediterranean Sea. Crustaceana 74: 1387–1391.
- Melzer, R. R., Bursic, M., Ceseña, F., Dömel, J. S., Heß, M., Landmann, S., Metz, M., Pfannkuchen, M., Reed, I. & Meyer, R. 2016. High decapod diversity revealed by minimal-invasive, short-term survey of Brijuni marine protected area. Biodiversity and Conservation 25: 1559–1567.

\* Feliza Ceseña, Hannes Geiselbrecht, Sebastian Landmann, Tobias Lehmann, Roland Meyer & Roland Melzer, SNSB – Zoologische Staatssammlung München, Münchhausenstr. 21, 81247 München, Germany  
\*\* Martin Heß, Tobias Lehmann & Roland Melzer, Department Biologie II, Ludwig-Maximilians-Universität München, Großhaderner Straße 2, 82152 Planegg-Martinsried, Germany  
\*\*\* Borut Mavric, NIB – Marine Biological Station, Fornace 41, 6330 Piran, Slovenia  
\*\*\*\* Martin Pfannkuchen, Institut Ruđer Bošković, Centar za istraživanje mora, Giordano Paliaga 5, 52210 Rovinj, Croatia  
\*\*\*\*\*Moira Bursic, Nacionalni Park Brijuni, Brionska 10, 52212 Fažana, Croatia

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Spixiana, Zeitschrift für Zoologie](#)

Jahr/Year: 2017

Band/Volume: [040](#)

Autor(en)/Author(s): Cesena Feliza, Geiselbrecht Hannes, Heß [Hess] Martin, Landmann Sebastian, Lehmann Tobias, Mavric Borut, Melzer Roland R., Meyer Roland, Pfannkuchen Martin, Bursic Moira

Artikel/Article: [First record of the snapping shrimp, Automate branchialis Holthuis & Gottlieb, 1958 for Croatian waters \(Decapoda, Alpheidae\) 36](#)