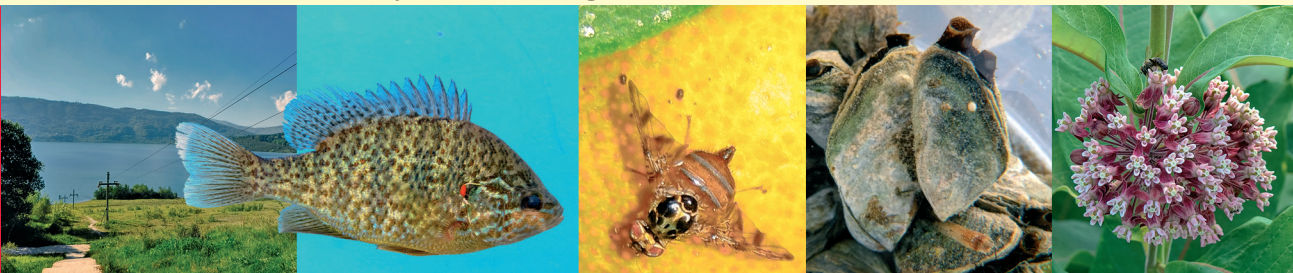


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*A special edition of the "REVIEW" dedicated to:*

# Joint ESENIAS and DIAS Scientific Conference and 9<sup>th</sup> ESENIAS Workshop

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03-06 September 2019

# Book of Abstracts

Ohrid, Republic of North Macedonia  
2019

## The Conference was organised by:

Hydrobiological Institute Ohrid (HIO)  
Public Institution Galicica National Park  
East and South European Network for Invasive Alien Species (ESENIAS)  
Danube Region Invasive Alien Species Network (DIAS)  
Institute of Biodiversity and Ecosystem Research,  
Bulgarian Academy of Sciences (IBER-BAS)



## The Conference was supported by:

Ministry of Education and Science of the Republic of North Macedonia  
Public Institution Galicica National Park



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## **EDITORS:**

**Sasho Trajanovski, Teodora Trichkova,  
Rumen Tomov, Vladimir Vladimirov,  
Hristina Kalcheva, Konstantin Zdraveski**

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The content of the abstracts are responsibility of  
the authors

Reviews were made by the Members of  
the Scientific Committee

**Citation:** Trajanovski S., Trichkova T., Tomov R., Vladimirov V., Kalcheva H., Zdraveski K. (Eds.) 2019. Book of Abstracts, Joint ESENIAS and DIAS Scientific Conference and 9<sup>th</sup> ESENIAS Workshop 'Species, ecosystems and areas of conservation concern under threat from the invasive alien species', 03-06 September 2019, HIO, ESENIAS, DIAS, IBER-BAS, Ohrid, Republic of North Macedonia, 160 pp.

**ISSN (ISBN): 1409-9373**

	44	1	160	2019
REVIEW	Vol.	No.	p.p.	Ohrid

**Publisher:** PSI Hydrobiological Institute Ohrid (HIO), East and South European Network for Invasive Alien Species (ESENIAS), Danube Region Invasive Alien Species Network (DIAS), Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences (IBER-BAS)

**Photos:** Teodora Trichkova, Milcho Todorov, Sanja Radonjić, Rumen Tomov, Vladimir Vladimirov

**Graphic design and desktop publishing:** Teodora Trichkova, Lyubomir Andreev

# Acknowledgements to the ESENIAS & DIAS Organising and Scientific Committees:

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## **Analyses of intestinal content of round goby *Neogobius melanostomus* (Pallas, 1814) in the Serbian part of the Danube River Basin**

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In the Serbian part of the Danube River, of the 25 fish species recorded, five species from the Gobiidae family have a participation with 10-20%. Since the early seventies, the spreading of the gobiids along the Danube River has been reported, mainly owing to the construction of dams and channels linking larger rivers. The round goby *Neogobius melanostomus* is a fairly small bottom-dwelling fish, living in brackish and freshwater environments. It is typically found near sandy, stony bottoms. This fish mostly stays in one place with noticeably restricted movement. A patchy distribution and long distances between native regions of occurrence and newly settled areas is characteristic for the current world distribution of the species. Most probably, transport has occurred in ballast waters. The aim of our study was to analyse the intestinal content of round goby in the Serbian part of the Danube River Basin.

The fish samples were collected during October 2018 at three localities in the Danube River (Zemun and Stari Slankamen) and Velika Morava River (Ljubičevo). A total of 35 individuals of round goby were collected and examined. Fish were caught with electrofishing (HONDA 1,2kW, 6 A) and transported to the laboratory, where the analysis of their intestines for food items was conducted. The intestines were examined under an Olympus binocular microscope and an Olympus stereomicroscope. Identification was carried out to the species level, using the appropriate identification keys.

At the locality Ljubičevo, eight from 18 sampled specimens were without intestine content. At the localities Zemun and Stari Slankamen, one specimen of ten and seven, respectively, was without food items. The analysis showed that the intestinal content of the round gobies consisted of representatives of the family Gammaridae (*Dikerogammarus* sp.), insect larvae (Trichoptera), Gastropoda, Bivalvia (family Unionidae) and Oligochaeta. The diet of fish samples from Ljubičevo consisted mostly of gammarids and oligochaets, while this of fish from Zemun and Stari Slankamen from caddisfly larvae and molluscs. Round gobies are voracious feeders, eating mussels and other molluscs, with up to 60% of their diet made up of mussels in some places. They also eat aquatic insect larvae and the young and eggs of other fish.

**Key words:** Food items, round goby, Danube River, Velika Morava River.

**Acknowledgment:** This research was supported by the Ministry of Education, Science and Technological Development of the Republic of Serbia, Projects No. OI 173045 and TR 37009.