



## NEW DATA ON CROATIAN CRUSTACEAN PLANKTON FAUNA (COPEPODA & CLADOCERA) IN ČINGI-LINGI LAKE

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**Stanković, I. & Ternjej, I.: New data on Croatian crustacean plankton fauna (Copepoda & Cladocera) in the Čingi-Lingi Lake. Nat. Croat., Vol. 18, No. 1., 181–184, 2009, Zagreb.**

Čingi-Lingi Lake is a gravel pit produced 25 years ago. During investigation of zooplankton in the year 2004 we determined eight species. Three of them are copepods and five of them are cladocerans. Čingi-Lingi Lake is the only locality where zooplankton in the Drava Valley region has been investigated.

**Key words:** Copepoda, Cladocera, plankton, Čingi-Lingi, Croatia

**Stanković, I. & Ternjej, I.: Novi podaci za faunu zooplanktona (Crustacea, Copepoda & Cladocera) u Hrvatskoj u jezeru Čingi-Lingi. Nat. Croat., Vol. 18, No. 1., 181–184, 2009, Zagreb.**

Jezero Čingi-Lingi je šljunčara nastala prije 25 godina. Tijekom istraživanja u 2004. godini u jezeru je utvrđeno osam vrsta planktonskih račića. Tri vrste spadaju u skupinu veslonožaca, a preostalih pet u skupinu rašljoticalaca. Jezero Čingi-Lingi je prvi i za sada jedini lokalitet na kojem su vršena istraživanja zooplanktona u Podravini.

**Ključne riječi:** Copepoda, Cladocera, plankton, Čingi-Lingi, Hrvatska

Zooplankton in Croatia has been systematically investigated since 1888 (ŠOŠTARIĆ, 1888). Many species have been found and there are still many to be found. Thus every attempt to take samples from new localities is very valuable for our knowledge of Croatian fauna.

The investigation was conducted on August 1, August 16 and September 2, 2004 in Čingi-Lingi Lake (Fig. 1). The lake is a man-made gravel pit; it was described in detail in STANKOVIĆ & TERNJEJ (2007).



Fig. 1. Čingi-Lingi Lake (photo: I. Stanković).

Specimens were collected in the 16 m deep part of the lake by means of vertical hauls using plankton net with a mesh size of 67  $\mu\text{m}$ . Samples were preserved in 4% formaldehyde. For the purpose of determination, animals were dissected in glycerol and analysed under an Olympus microscope. Copepod determination was carried out according to EINSLE (1993, 1996) and KIEFER (1978), while cladoceran determination was carried out according to AMOROS (1984), MARGARITORIA (1983) and KOROVCHINSKY (1992).

We determined 8 species of zooplankton fauna in Čingi-Lingi Lake. There were 3 species of Copepoda and 5 species of Cladocera. Copepod nauplii and copepodite stages were also established. A detailed systematic and species list is presented:

**Class** Maxillopoda Dahl, 1956

**Subclass** Copepoda Milne-Edwards, 1830

**Order** Calanoida G. O. Sars, 1903

**Family** Diaptomidae Baird, 1850

1. *Eudiaptomus gracilis* (G. O. Sars, 1862)

**Order** Cyclopoida Burmeister, 1834

**Family** Cyclopidae Dana, 1846

2. *Cyclops bohater* Kozminski, 1933

3. *Thermocyclops oithonoides* (G. O. Sars, 1863)

**Class** Branchiopoda Latreille, 1817

**Suborder** Cladocera Latreille, 1829

**Family** Bosminidae Baird, 18454. *Bosmina longirostris* (O. F. Müller, 1776)**Family** Daphniidae Straus, 18205. *Ceriodaphnia quadrangula* (O. F. Müller, 1785)6. *Daphnia galeata* G. O. Sars, 18647. *Daphnia longispina* (O. F. Mueller, 1785)**Family** Sididae Baird, 18508. *Diaphanosoma brachyurum* (Liévin, 1848)

Čingi-Lingi Lake is the habitat where *C. bohater* was found for the first time in Croatia and the Balkan Peninsula (STANKOVIĆ & TERNJEJ, 2007). According to TERNJEJ & STANKOVIĆ (2007) the lake is also the first place to be investigated in the Drava Valley region (C7) (NIKOLIĆ *et al.*, 1998). Apart from this location, there are no data for the following regions: Banija (C2), Zagorje (C5), Baranja (D1) and the Đakovo-Vinkovci loessial zone (D3) (Fig. 2). Accordingly, this presents a big contribution to Croatian faunal research.

Low species richness is a result of the brevity of the period of investigation and of the investigation being preliminary in nature. Further investigation is expected.

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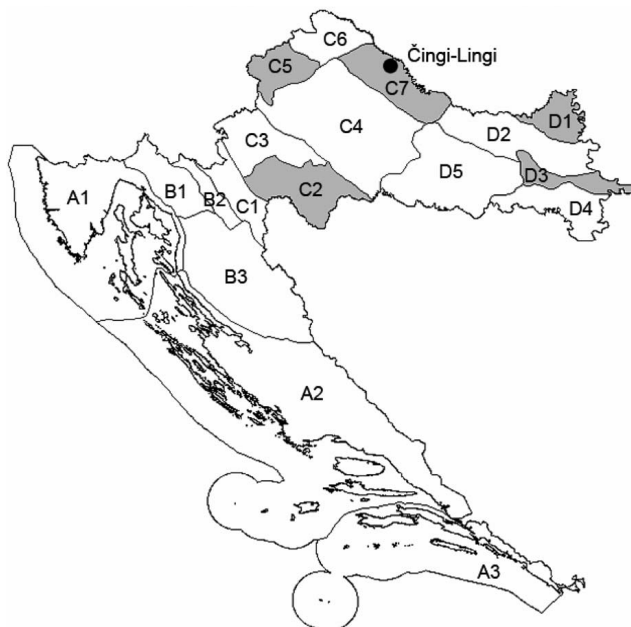


Fig. 2. Map of Croatian mesoregions (according to NIKOLIĆ *et al.*, 1998) with regions marked in grey that have never been investigated.

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## SAŽETAK

### Novi podaci za faunu zooplanktona (Crustacea, Copepoda & Cladocera) u Hrvatskoj u jezeru Čingi-Lingi

I. Stanković & I. Ternje

Zooplankton se u Hrvatskoj istražuje od 1888. godine, no unatoč tome nisu u potpunosti istražena sva područja. Jezero Čingi-Lingi, nastalo kao šljunčara u neposrednoj blizini rijeke Drave, za sada je jedini lokalitet na kojem su vršena istraživanja zooplanktona u Podravini. Do sada su uz Podravinu potpuno neistraženi Banija, Hrvatsko zagorje, Baranja te područje Đakovo-Vinkovci. U jezeru su tijekom istraživanja 2004. godine utvrđene tri vrste vesloložaca (*Eudiaptomus gracilis*, *Cyclops bohater*, *Thermocyclops oithonoides*) i 5 vrsta rašljoticalaca (*Bosmina longirostris*, *Ceriodaphnia quadrangula*, *Daphnia galeata*, *Daphnia longispina*, *Diaphanosoma brachyurum*).