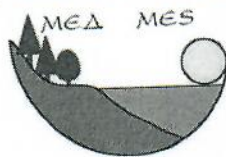


МАКЕДОНСКО ЕКОЛОШКО ДРУШТВО
MACEDONIAN ECOLOGICAL SOCIETY



III КОНГРЕС НА ЕКОЛОЗИТЕ НА МАКЕДОНИЈА СО
МЕЃУНАРОДНО УЧЕСТВО

и обележување на 80-годишнината од животот на
проф. д-р Љупчо Групче и 60 години научна работа

КНИГА НА АПСТРАКТИ

ABSTRACT BOOK

III CONGRESS OF ECOLOGISTS OF THE REPUBLIC OF
MACEDONIA WITH INTERNATIONAL PARTICIPATION

and marking the 80-Anniversary of Prof. Dr. Ljupčo Grupče's life
and 60 years active scientific work

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is leached from the soil and transported to surface and underground waters, polluting rivers, lakes, seas and oceans.

During 2004-2006, samples (water and sediments) were collected from the north-east part of Lake Ohrid, from Daljan to Gorica, in six localities.

The results of this investigation show that nitrogen-fixing bacteria are much more numerous in the lake sediments than in the water. The great abundance of bacteria in the region of Grasnica, Sateska and Daljan is a result of the contribution of the tributaries (Velgoska, Sateska and Koselska), which are under a big anthropogenic influence, loaded with nutrients and pollutants. A large influence on the pollution of this part of the lake also comes from the surrounding arable farms, which are treated without any controls on fertilizer use.

PHYTOPLANKTON PRODUCTION OF THE SALT PUDLLES NOVO ILJE I AND NOVO ILJE II NEAR MELENCI (SERBIA)

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The puddles Novo Ilje I and Novo Ilje II are aquatic ecosystems periodically filled with moderate salt and alkaline water. Phytoplankton production in Novo Ilje I in 2003 was $2.6 \times 10^8 \mu\text{m}^3/\text{l}$, and in 2004 $1.09 \times 10^8 \mu\text{m}^3/\text{l}$. In Novo Ilje II phytoplankton production in 2003 ($3.02 \times 10^8 \mu\text{m}^3/\text{l}$) was 2 times bigger than 2004 ($1.62 \times 10^8 \mu\text{m}^3/\text{l}$). In 2003, quantitative and biomass analyses show *Euglenophyta* domination. *Chlorophyta* appeared to be the most abundant component in Novo Ilje I in 2004 and *Cyanoprokaryota* and *Chlorophyta* in Novo Ilje II. Results of biomass analysis show dominant role of *Euglenophyta* in Novo Ilje I in 2004, and *Xanthophyta* and *Euglenophyta* in Novo Ilje II.

PHYTOPLANKTON OF THE BARJE RESERVOIR, SERBIA

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Phytoplankton of the Barje Reservoir is characterized by the presence of cosmopolitan species of algae in the divisions Cyanophyta, Pyrrophyta, Bacillariophyta, and Chlorophyta. In regard to the number of species, algae in the division Bacillariophyta are dominant (more than the species *Asterionella formosa*, *Fragilaria crotonensis* and *Diatoma anceps*). A clear seasonal succession is discernible in both the qualitative and quantitative presence of phytoplankton in the given reservoir. The number of species increases from the colder to the warmer periods of the year with the greatest values of this index occurring in late summer (August). With respect to the number of species and absolute abundance, Bacillariophyta are dominant in the colder periods of the year (March), whereas Cyanophyta and Chlorophyta are dominant during the summer months. High primary production throughout the whole year with a pronounced peak during the summer indicates the eutrophic status of the Barje

Reservoir. Saprobiological analysis based on the use of algae as bioindicator has established that the water of the Barje Reservoir is of the β -mesosaprobic type.

DATA ON PHYTOPLANKTON OF SOME ADRIATIC LAGOONS OF ALBANIA

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Data on phytoplankton of Narta, Karavasta and Patoku, the most important lagoons of the Adriatic coast, are presented here. This study comprises a seasonal approach in six tours: November 2004, April and November 2005, April and November 2006, and April 2007; samples were collected in four stations in Narta, two in Karavasta and two in Patoku. Relatively speaking, low values of phytoplankton were observed mainly in Patoku and Karavasta. Diatoms predominate often, but a relatively high amount of dinoflagellates were found in Karavasta and Narta (November 04) and almost all lagoons in April 06, some of them toxic species (from genus *Prorocentrum* and *Dinophysis*). The scarce communication with the sea and the eventually high content of nutrients from the surrounding villages and cultivated fields were probably the consequence of the high presence of filamentous cyanobacteria (*Oscillatoria* spp.) in Narta, and the high presence of dinoflagellates even in the other lagoons.

Considering the biological indicators in paralic ecosystems given by Guelorget & Perthuisot (1984), the high content of phytoplankton in almost all stations shows that Narta lagoon belong mainly to zone V, suitable to an extensive fishing (i.e. mullets) or shrimps (*Peneidae*). Karavasta and Patoku may belong to the zones IV and V, too, as confirmed even by Guelorget & Lefebvre (1993) during their campaign in April 1993 in the lagoons of Butrinti, Karavasta and Patoku.

DIVERSITY OF PHYTOPLANKTON IN PONJAVICA RIVER (SERBIA)

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Ponjavica River, or "Park of nature Ponjavica" (proclaimed in march 1995), is a small slow-running flat-land river situated in South Banat, Serbia which springs from the Kapetan's pond, near the village of Starčevo and enters into the Danube river near the village of Dubovac. The Ponjavica River is 20 km long with a maximum depth of about 2.5 m and minimum depth of about 0.2 m.

Water samples for algological analysis were collected from two locations: Omoljica and Banatski Brestovac in December 2001, May 2002, August 2002, November 2002 and November 2005. A total of 302 taxa of algae were identified from 7 divisions: