

ABSTRACT BOOK



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SEASONAL DYNAMICS OF PLANKTOTHRIX RUBESCENS (DE CANDOLLE EX GOMONT) ANAGNOSTIDIS ET KOMÁREK AFTER A SEVERE ALGAL BLOOM IN MULTIPURPOSE WATER RESERVOIR VRUTCI (SERBIA)

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An intensive *Planktothrix rubescens* bloom occurred in the Vrutci multipurpose reservoir in December 2013, disrupting the regular water supply in the Town of Uzice for 43 days. The reservoir was formed in 1984 at 621 m altitude. It has a volume of 50 million m³ and a maximum depth of 60 m. In the last 20 years, the water quality was monitored only once a year, making the determination of the causes of the algal bloom very difficult. Monthly monitoring of the phytoplankton population and basic physicochemical parameters was conducted during 2014. During winter circulation, TP and Chl a were uniformly distributed, with average concentrations of 40 µg/L and 15 µg/L, respectively. During thermal stratification, phosphorus was accumulated in the metalimnion, reaching a maximum concentration of 180 µg/L at 6 m depth in the near dam profile in August. The abundance estimate range was from 72 cell/mL in September to 251920 cell/mL in June. The biomass estimate range was from 4,5 µg/L in September to 10239,5 µg/L in July. The total share of *P. rubescens* in the phytoplankton population reached its maximum (99,74%) at 6 m depth in January and the minimum value (17,13%) was observed in September.