Lemna minor, A SOLUTION FOR THE DECONTAMINATION OF POLLUTED WATERS BY NITRATES

Daniela BALAN[1*], Gabriela LUŢĂ[1], Evelina GEHRGHINA[1]

Abstract. *This paper presents some experiments on the efficiency of the duckweed (Lemna minor L.) applied for the purpose of removing nitrates from wastewater from a pig farm, so as to reach the behaviour of clean water enriched with standard nutrients. The efficiency was tested by measuring the biomass, protein and nitrate contents after each interval of twenty days. The maximum biomass and protein production was obtained by algae development on wastewater (43.6 mg/L; 52% respectively) compared with those obtained on clean water (6.6 mg/L; 48% respectively). The maximum nitrate removal efficiency was obtained after 100 h on wastewater (89.72%) and after 120 h on clean water (85.14%).*

Key words: biomass, *Lemna minor*, nitrate, protein

[1]University of Agronomic Sciences and Veterinary Medicine of Bucharest – Faculty of Biotechnologies, 59 Mărăşti Blvd. District 1. 011464. Bucharest, Romania
*Corresponding author email: balan.dana@gmail.com