

## **Enrichment of freshwater zooplankton *Moina micrura* with probiotics isolated from microalgae**

### **ABSTRACT**

**Aim:** The present study investigated the ability of probiotics to enrich freshwater zooplankton, *Moina micrura* based on population density, population growth rate and mean body size increment. **Methodology:** Different concentrations of probiotics were introduced to one-day-old female *Moina* in filter-sterilized freshwater pond water. Addition to probiotic, *Chlorella* sp. was added in culture media as a food source. **Results:** Population density, population growth rates and increase in mean body size of *Moina* were observed and recorded to evaluate the ability of probiotic to enrich *Moina*. All four probiotics were able to enrich *Moina* in treatment PC 1 (10<sup>4</sup> CFU ml<sup>-1</sup>) and PC 2 (10<sup>6</sup> CFU ml<sup>-1</sup>) at a better rate compared to the control group (no probiotic). Also, the specific population growth rate ( $\mu$ ) and mean body size of *Moina* in treatment PC 1 and PC 2 were significantly higher than in treatment PC 3 (10<sup>8</sup> CFU ml<sup>-1</sup>) and control for all probiotics. **Interpretation:** All probiotics were able to enrich *Moina* and increased their growth at lower concentrations (PC 1 and PC 2). Supplementation of probiotic at high concentration was unnecessary.