ABSTRACT

ADDITION OF COW’S BLOOD FERMENTED AS A NUTRITION SOURCE IN CULTURE Daphnia sp.

By
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Cow’s blood is organic waste that is used for artificial fish feed additives and after fermentation the cow's blood can be using as organic fertilizer plant. The aim of this study is to determine the effect of adding fermented cow’s blood as a nutrition source of to the increase the population of Daphnia sp. This research was using completely randomized design (CRD) with 5 treatment and 3 repetitions like the addition of milk powder as much as 1 gram / liter (control), the addition of fermented cow’s blood as much as 3, 5, 7 and 9 ml / liter. The aquaria’s size were using 15 x 15 x 25 cm, filled with water 4 liters and density Daphnia sp. 50 ind / liter. The addition of fermented cow’s blood with 5 ml / liter showed the highest population in the media culture of Daphnia sp. with a mean population 1740 ind / liter on day 8\textsuperscript{th}. The parameter of water quality such as Dissolved Oxygen (DO), pH, temperature and ammonia in the research is still in the range that can be tolerated by Daphnia sp.

Keywords: Daphnia sp., cow’s blood, fermenting, a nutrition source