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Abstracts

Ana I. Neto

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» Indoor cultivation of marine microalgae

T.M. Lourenço¹, A. I. Neto²

¹ Seção de Biologia Marinha, Laboratório de Ficologia, CIRM & Departamento de Biologia, Universidade dos Açores, Apartado 1422, Ponta Delgada, São Miguel, Açores 9501-801, Portugal

The use of marine microalgae as a source of food for cropping systems of larvae and juveniles of bivalve has proven to be more efficient than inert diets currently prepared.

In the present study, aimed at being used as food for the clam *Ruditapes decussate*, the microalgae *Tetraselmis suecica*; *Dunaliella salina*; *Nannochloropsis oculata*; *Isochrysis galbana* and *Monochrysis lutheri* were cultured. These cultures were done in plastic tubes with controlled temperature, air flux, salinity and irradiance. The medium used as a marine water enrichment solution was F/2 Guillard with a known composition of salts, trace metals and vitamins.

Daily samples from the cultures were taken to estimate biomass and with it build growth curves for three different methods on the estimation of biomass - colorimeter, dry weight and hemacytometer. The relation between quantification methods was calculated with the values and the continuous line adjusted, through the logistic model $Y = mx + b$. Colorimeter has proven to be the most efficient quantifying method by comparing the parameters Turbidity/Color and for most species the curves corresponded to the model proposed and that the r^2 ranged from about 0.96 to 0.98, indicating that there is correlation between the data and those of the adjusted curve. The species *Dunaliella salina* presented the greatest average growth.

Keywords Biomass Culture · Marine microalgae · *Tetraselmis suecica* · *Dunaliella salina* · *Nannochloropsis oculata* · *Isochrysis galbana* · *Monochrysis lutheri* · F2 Medium · Growth Rate

Contact author: T.M. Lourenço