EVALUATION OF GROWTH AND CO2 BIOFIXATION BY SPIRULINA PLATENSIS IN DIFFERENT CULTURE MEDIA USING STATISTICAL MODELS

Suarez Marenco Marianella María, W. B. Morgado Gamero, Sarmiento Rubiano Adriana, Parody Muñoz Alexander Elías, Jesus Silva

Abstract

This study was proposed for evaluating the CO2 fixation by Spirulina platensis in different media, in order to understand the growth dynamics of the photosynthetic microalgae, a useful resource for the mitigation of climate change. The percentage of CO2 fixation by the strain S. platensis UTEX LB 2340 was determined during 11 days of sampling, using four (4) culture media. According to the statistical models, spirulina medium represented the best option in terms of cell growth between the tested ones. In this model, the variable day had presented a significant difference, this could be related to the exponential phase of the microorganism used.

Keywords

S. platensis sp, Carbon dioxide, Fixation, Culture media, Climate change, Statistical models