

## Instructions for Abstracts

- 1 The top limit of words for the poster abstract is 300
- Abstracts text have to be written using Arial 12 font. The paragraph has to be "Justified" and line separation has to be 1.0 (simple).

3 – Abstracts have to be written in English.

4 – Abstracts have to present a brief description of the results and conclusions. Abstracts containing only introduction and/or description of a research project will not be accepted.

5 – The title have to be written using Arial 14 font in bold. The paragraph has to be centralized.
6 – Authors names have to be written using Arial 12 font in bold. The name of the author who is responsible for the poster submission and presentation has to

be underlined. Complete author last name is followed by first and middle name initials. The paragraph has to be centralized. 7 – Authors affiliation has to be indicated by superscripted numbers. Affiliation should contain institution name and country. 8 – Funding agencies may be mentioned in a separate line at the end of the abstract. Arial 12 font in italics should be used.

## Lipid content in the cultivation of *Haematococcus pluvialis*

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Haematococcus pluvialis is a freshwater species of Chlorophyta and is currently investigated with respect to its ability to accumulate the strong antioxidant astaxanthin under stressful conditions. The study of its lipid content has not been addressed by the scientific community, however, H. pluvialis has some advantages that would help in achieving lipid biomass, for example, is tolerant at pH>9, its cells diameter can reach approximately 70 µm which facilitate filtration and the natural flocculation. Therefore, the goals in this study were to assess the physiological performance of *H. pluvialis* aiming to obtain the period of highest biomass accumulation lipid. The strain used was Haematococcus pluvialis UTEX-2505 and the factors evaluated were: temperature controlled in a growth chamber at 28°C and constant stirring (60 rev min-1), intensity of radiation (photoperiod of 12h), nitrogen e sodium acetate under three levels added to liquid Bold's Basal Medium (BBM). The initial concentration of inoculums was adjusted to 10<sup>3</sup> cell mL<sup>-1</sup>. Samples were collected daily to assess the optical density until it was observed a decrease in cell concentration. About 48 h after inoculations, medium with addition of sodium acetate had an increase in the pH from 7.0 to 9.0, which increased the turbidity of culture medium. Treatments with N in the medium maintained the pH ranged from 7.5 to 8.0. It was found that with the increase in pH value cells still growing and did not produce cysts. The rate of cells growth was in average of 1.5 d<sup>-1</sup> and the total lipid content in the microalgae biomass, detected by fluorescence emission spectroscopy using Nile Red, was higher in the exponential phase of growth.

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