

KOENING, Maria Luise; LACERDA, Sirleis Rodrigues de; BARTOLOMEU, C. C.; PASSAVANTE, José Zanon de Oliveira; COSTA, K. M. P. Cultivo em laboratório de *Tetraselmis chuii* e *Tetraselmis tetrathele* (Chlorophyceae) com fertilizantes orgânicos. **Arquivo de Biologia e Tecnologia**, Curitiba, v. 33, n. 1, p. 91-103, 1990.

ABSTRACT

Experiments with the utilization of chicken manure as culture media for *Tetraselmis chuii* and *Tetraselmis tetrathele* were carried out in order to determine the most exponential growth phase and the concentrations of chlorophyll-a. At the same time concentrations of nutrients, pH and salinity were determined. The addition of 10 to 40 ml of chicken manure was tested, with the cell density presenting the most satisfactory results following the addition of 30 ml for both species tested. *Tetraselmis chuii* presented maximum average concentration of $9,3 \times 10^5$ cell/ml and *Tetraselmis tetrathele* a maximum average concentration of $1,3 \times 10^6$ cell/ml. The chlorophyll-a concentration, however, presented a maximum growth of $1,003,88 \text{ mg/m}^3$ for *Tetraselmis chuii* on addition of 30 ml of chicken manure, while *Tetraselmis tetrathele* presented a maximum growth of $2,014,16 \text{ mg/m}^3$ on addition of 40 ml of chicken manure. The nutrient analysis revealed a high nitrate-N and phosphate-P concentration, the media being favorable to the development of these microalgae.