

RESEARCH ARTICLE

Effect of salinity on biomass and biochemical constituents of *Spirulina platensis* (Geitler)

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ABSTRACT

A study was conducted to investigate the impact of NaCl on the growth and biochemical traits of *Spirulina platensis*. In order to determine the impact of NaCl, *Spirulina* was exposed to different concentrations of NaCl ranging from 0.1-0.4M besides control, over a period of 30 days. It was found that biomass, total chlorophyll, phycocyanin and lipid contents stimulated at lower concentrations of NaCl (0.1 and 0.2M) but reduced at higher (0.3 and 0.4M) concentrations. The total protein contents inhibited at all concentrations of NaCl. While β -carotene and carotenoid contents increased upto 0.3M and thereafter declined. The results indicated that *Spirulina platensis* showed diverse response to NaCl stress.

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