

REVIEW ON THE PRODUCTION OF BIOHYDROGEN USING
GREEN ALGAE *CHLAMYDOMONAS REINHARDTII*
BY BIOPHOTOLYSIS

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ABSTRACT

The purpose of this study is to review the parameters affecting H₂ production by green algae through biophotolysis. The parameters investigated were the photobioreactor, light intensities, pH and nutrients deprivation. The utilisation of Sartorius photobioreactor allowed a more flexible and easy control of process parameters. The intensities of light during pre-growth and H₂ production phase plays a major role in the net total H₂ produced. The optimum pH for hydrogen production by biophotolysis of green algae is found to be at 7.7. New studies on nutrient deprivation has shown the ability to significantly increase H₂ production, especially under potassium deprived conditions.

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