

ABSTRACT

Carbon dioxide, a Greenhouse Gas (GHG), is the one of the principle pollutant, warming earth. In the past 150 years, anthropogenic activities have pumped enough carbon dioxide into the atmosphere to raise its levels to 400 ppm, higher than they have been for hundreds of thousands of years. Algae occur in a variety of natural aqueous and terrestrial habitats in environment. A promising technology could be the biological capture of CO₂ using microalgae due to its unmatched advantages over higher plants and ocean fertilization. Microalgae are phototrophic microorganisms with simple nutritional requirements, and comprising the major primary producers on this planet. . This research study was taken up to alleviate certain limitations associated with the technology such as low CO₂ sequestration efficiency and low biomass yields.

Keywords: Microalgae; Carbon dioxide; GHG; Carbon Sequestration; Green House Effect.